FEDCO

1999

I celebrate myself,
And what I assume you shall assume,
For every atom belonging to me as good belongs to you.

I loafe and invite my soul,
I lean and loafe at my ease . . . . observing a spear of
summer grass.

Walt Whitman
Song of Myself
Leaves of Grass 1855

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Full index on the back cover. Phone (207) 873-7333

A Fedco Primer for New Friends and Old

Fedco has four divisions: Seeds, Moose Tubers and Organic Growers Supply, Trees, and Bulbs, and sends out three catalogs annually. This catalog contains descriptions and order forms for Seeds, Moose Tubers, Organic Growers Supply, and seedlings.

We work out of two warehouses located two miles apart in Clinton, Maine. Seeds are on the ground floor of our converted chicken barn on the Upper Bellsqueeze Road, and trees are in the basement. Seed potatoes and supplies for organic growers are in our rented facility on Baker St.

Our business office is in nearby Waterville. We do not have a retail store. We deal exclusively by mail and fax order except during designated pickup and public sale days and our annual excursions to Common Ground Country Fair and NOFA Summer Conference.

In our part of the world frosts occur nine months of the year and the ground remains frozen for about five months from late November until mid-late April.

Trees are alive, highly perishable, are dug in the spring after the ground thaws, must be kept cool and wet and cannot freeze. We ship trees and perennial plants only in the spring.

Fall bulbs are alive, perishable, need to be kept cool but cannot freeze, and must be shipped just before planting in fall.

Seed potatoes and onion sets are alive, perishable, must be kept cool but cannot freeze, and must be shipped in spring after frost.

Seeds are alive, dormant, must be kept cool and dry, may freeze if kept dry. Most customers want them as soon as possible in late winter/early spring before the ground has thawed.

Supplies are not alive and may be shipped at any time.

How to Order

Because they work out of separate warehouses and/or have separate shipping schedules, each division has its own order form.

- Please use the proper order form for each division.
- Please do not mix orders from separate divisions on one form.
- We encourage you to send in separate forms from more than one division at the same time. You may pay with one check or credit card charge. Figure totals for each division on the proper form, then use the box on page 48C as a worksheet for figuring your grand total.
- We accept mail and fax orders but not telephone orders.

The chart below summarizes our schedules.

Faxing your Order

Last year, our first accepting fax orders, was a learning experience. We now have a dedicated fax line: (207) 872-8317.

You can help us to facilitate fax order processing:

- Please double-check your order before you fax to reduce catalog number and pricing errors.
- Make sure your order is legible; fax orders lose clarity in transmission.
- Mail the long grid forms instead of faxing them. You will save money as well as show consideration for others not wanting to wait in line to fax us.
- Use one of our order forms. Last year, computer-generated maverick forms cost us many extra hours of order-processing time.
- Be prepared for a traffic jam if you must fax right around deadline time.
- Mail your order instead of calling us if you have persistent trouble getting through.
- Please **do not mail** another copy if you fax your order. We don't want to fill your order twice.
- Please don't call for order confirmation. We'll call you after 4 pm on the day we receive your fax order or the next day for orders received after 4.

OGS
OGS
FEDCO SEEDS
FEDCO SEEDS
FEDCO SEEDS
FEDCO SEEDS
MOOSE
MOOSE
SEEDS
OGS
AVOID FAX DELAYS: FAX YOUR ORDER EARLY!

Catalog	Goods offered	Coordinators	Catalogs available	Discount deadline	Ordering deadline	Shipments
Fedco Bulbs	tulips, narcissus, crocus, hyacinth, iris, paperwhites amaryllis, seed garlic	Joanna Linden Gene Frey Roberta Bunker	June	mid-August	late August	late Sept-early October
Fedco Trees	fruit trees, berry bushes, ornamental shrubs, grapes, conifers, nut & shade trees, spring bulbs & perennial plants	John Bunker Roberta Bunker Susan Kiralis Ann Wilson	October	December 4	March 12	late April
Fedco Seeds	vegetable, flower, & herb seeds, books	see page 8	November	None except earlybird Jan. 30	March 19	mid-January-late March
with Organic Growers Supply	soil amendments, cover crops, garden tools & supplies	David Shipman Susan Kiralis	November	none	none	year round
and Moose Tubers	seed potatoes, onion sets	Alison LaCourse Paul LaCourse	November	February 26	May 14 Feb. 26 for best selection	mid-April-mid-May
and Seedlings	organic seedlings	Gene Frey	November	n/a	March 12	April 30-May 2 pickup

> Do I contradict myself?
> Very well then . . . . I contradict myself;
> I am large . . . . I contain multitudes.
>
> *Song of Myself*
> Leaves of Grass 1855

FEDCO SEEDS

Co-op Seed Packers

Welcome to our 21st annual garden seed order! Thanks to your support, in 1998 our cooperative exceeded $1 million in sales for the first time. The seed order grew 16% to almost $400,000. Between the January ice storm (which got us both coming and going) costing us nearly four work days, and our record volume, we had to scramble to keep from being inundated.

By adding crew, working hard and pirouetting neatly around most pitfalls, we stayed close to our shipping schedule. But we hope to do better in 1999. To that end, we've eliminated the volume discount deadline. The graph shows how that deadline has become dysfunctional as we've grown, concentrating too many orders into one week. By spreading out the orders and flattening the peak, we should be able to shed overtime costs and speed order turnaround time. Even as we make changes to improve our operation, our goal remains constant: To fill your orders accurately with high quality seeds at the lowest possible prices.

Cooperation Works for Us

Because we do not have an individual owner or beneficiary, profit is not our primary goal. We are one of the few seed companies in the United States organized as a cooperative. Consumers own 60% of the cooperative and worker members 40%. Consumers and worker members share proportionately in the cooperative's profits through our annual patronage dividends.

Our cooperative structure gives workers a real voice in running the company and a real stake in its success, enabling us to attract and retain talented workers. Year after year our staff turnover has been very low.

Our company culture derives from our history as a cooperative. Our first customers were other cooperatives and we developed many of our procedures specifically to serve them. Although we have diversified in recent years, almost half of our business still comes from cooperative or group orders. Our dedicated group order coordinators are partners in our business.

The cooperative ethic recognizes that we are all in this together. What is good for our managers should be good for our workers and good for our customers and vice versa. Cooperation is a two-way street. We design our orders to encourage you to participate actively. When you follow our directions, use the correct forms and meet our deadlines you are doing some of the work involved in processing your order and helping us keep our prices low and our service brisk. When you share your experiences with us, visit us at our warehouses and fair booths, and let us know what you need, you are a partner in strengthening our cooperative.

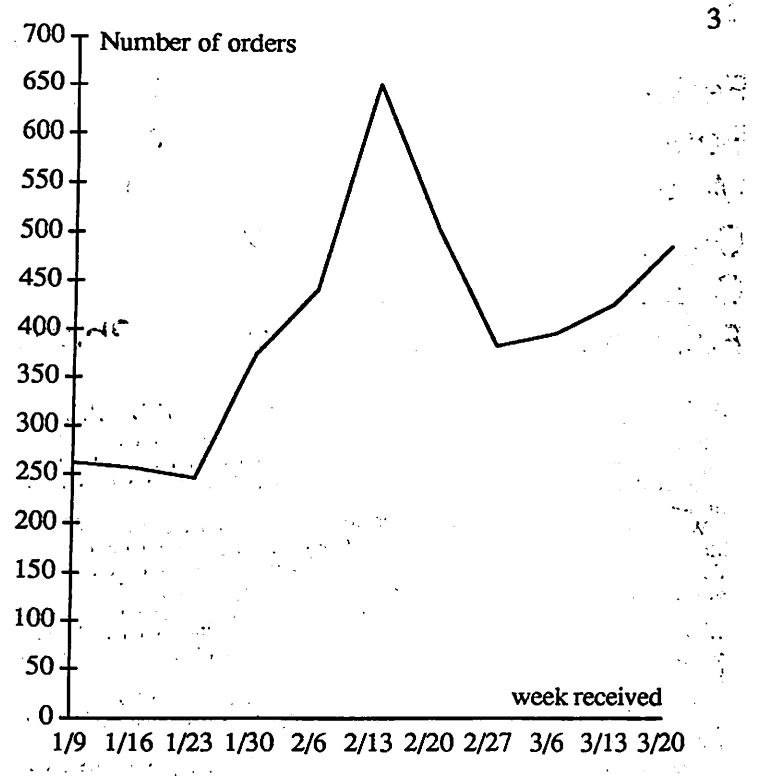
Is FEDCO a Good Fit for You?

Many companies charge as much as they can get away with. At Fedco we charge as little as we can get by with. Unlike companies which boast of unlimited service (without telling you how much that costs), Fedco asks for your cooperation. In return for a few extra minutes of your time, we pass on significant savings. More importantly, each of us, buyers and sellers alike, benefits by sharing in work done with craft and care.

We could be like other companies. We could alphabetize the catalog, mix all four divisions and supply one blank for all orders, take telephone and rush orders, ship within 24 hours, get an expensive web site and spend gazillions on glossy catalogs and advertisements. We could hire people to sit in front of a VDT for eight hours straight or do nothing but answer the telephone all day. We could organize second and graveyard shifts at our warehouse and go 24 hours a day in February, March and April. But we choose not to because we care about the quality of our workplace and our work.

We want to please our customers, but Fedco is not for everyone. That's why we're straightforward about what we offer and what we don't. Use the chart below to compare Fedco with any other seed company.

	Fedco Seeds	Seed Company X
Price	Always among the lowest	
Volume Discounts	Generous	
Earlybird discount	Yes, 2% by Jan. 30	
Free shipping?	Yes	
Handling charge?	Fax orders $2, others none	
Minimum order?	Yes, $5	
Refunds?	Yes, cash, never credit slips	
Packet size	Standard or more generous	
Untreated?	100%	
Open-pollinated?	70% of vegetable varieties	
Year-round ordering?	No, seasonal	
Credit Cards?	Yes, Visa and MasterCard	
Fax Orders?	Yes	
Online orders?	Not yet	
Telephone orders?	No	
24 hour service?	No, see shipping schedule, p. 7.	
Color catalog?	No	
Sell your name?	Never	
Exchange mailing lists?	Occasionally, only with permission	



Make Cooperation Work for You

You can make cooperation work for you, too, by creating group orders which can take advantage of our substantial volume discounts. It is easy to form a group: Get together with friends, neighbors, co-workers or other members of your club, grange, MOFGA chapter, church or coop. Distribute catalogs to interested members as soon as you can. We'd be happy to send you additional catalogs or order forms if you need them. Choose someone to collate your members' orders into one combined order which you send to us. Use the volume discounts as a fundraiser or pass them on to those who do the work on the order. Schedule a work party after the seeds arrive to break down your group order into individual orders. For our pamphlet with more detailed "Information for Group Coordinators" send a SASE.

It Can't Happen Here?

Word that M&M-Mars Inc. had taken over Seeds of Change sent some tremors of apprehension through the alternative agricultural movement. How this development will affect Seeds of Change's mission remains to be seen. It might be less dramatic than it sounds, because the candy bar folks were heavy investors from early on.

Recently I have pondered: In a world of mergermania, could Fedco ever be bought out? Someday we may receive a tempting offer. But would we ever accept? Before such a change could occur, not only our staff but also our members would have to approve. I hope and believe that could never happen.

I've heard that Seeds of Change lost $11 million before the takeover. Our development has been very different We never tried to create a national market quickly as Seeds of Change did. We've never gone into debt to venture capitalists. Instead, we've grown incrementally, step by step, mostly by word of mouth and we've had no red ink. Just as we prefer the slower, but fundamentally sounder, method of feeding the soil instead of offering quick fixes to the plants, so we believe in building our cooperative business by creating a strong financial foundation rather than fueling rapid growth with leveraged capital.

WE APPRECIATE YOUR NEATNESS!

Organic Seed?

Some folks mistakenly believe that we sell only organic seed. In fact, only a few of our seed crops are organically grown, and these are clearly noted in the catalog. Commercial quantities of organic seed are still difficult to find. Send us a SASE for a list of some other retail sources of organic seed.

However, **all** of our seeds are **untreated.**

Because we expect the National Organic Standards to take effect in 2000, we are listing as 'organic' only those seed crops which have been certified by an authorized agency. Some of our seed growers, although following accepted organic practices, have chosen for a variety of philosophic or economic reasons not to apply for certification. We have identified in the catalog where uncertified crops have been grown without herbicides, pesticides and chemical fertilizers.

Our Own Seed Crops

We devote many hundreds of hours annually to research. In Nikos Kavanya's extensive variety trials program, skilled staffers and customers evaluate hundreds of cultivars at multiple sites.

Some years ago we began cooperating with Maine seedspeople interested in growing commercial seed crops of varieties specially adapted to this climate, focusing on traditional regional favorites such as dried beans, and heirloom varieties not available from commercial channels. This program first bore fruit in 1991 when we successfully grew seed for 19 varieties. We have extended it to other states and abroad and now offer a diverse selection of melons, squash, gourds, lettuce, peppers, flowers and medicinal herbs as well as beans and tomatoes rarely found in other seed catalogs. Each summer in our trials we are continuing to identify outstanding heirloom varieties, selecting the best for seed multiplication, and making plans to introduce them in future catalogs. We will continue to do our part to ensure that the best heirlooms are reintroduced into commerce.

Nevertheless, like most other retail seed companies, we grow only a small percentage of the seed that we sell. Because our Maine climate is not ideal for raising commercial quantities of seed for most varieties, we often purchase quality seed grown in optimum climatic conditions by expert seedspeople in Idaho, Washington, Oregon, California and other western states, or imported from Japan, France, Holland, Denmark, Germany, Switzerland or Italy. In particular, many hybrid varieties come from a few dozen large wholesalers with sophisticated breeding programs and unrivalled expertise in their specialties. Whatever their geographic origin, all of our offerings have been tested in our trials program for high performance in our cold New England climate.

Fedco Will Not Offer Transgenic Cultivars

At our 1996 Annual Meeting we voted unanimously not to knowingly offer for sale any transgenic variety because we think that the benefits of propagating such genetically engineered cultivars do not warrant the risks they pose to the environment. For more information, see "Terminator Technology" on the next page.

$ Fedco Supports Sustainable Agriculture $

At our 1997 Annual Meeting, the staff voted to re-endow our Educational Subsidy Fund with a $3,300 allocation. This money is being donated to individuals and groups working on projects to further goals of cooperation, to preserve and extend our genetic diversity, and to educate consumers, gardeners and farmers about the benefits of sustainable agriculture. In the past we have funded workshops on seed-saving and Community Supported Agriculture, supported seed-saving exchanges, and co-sponsored the November, 1997, Penn State conference on Preserving Crop Biodiversity in the Northeast.

Help MOFGA'S Common Ground Fair Permanent Home Campaign!

1998 was our seventeenth consecutive year exhibiting at Common Ground Fair, a magical gathering where we visit with many hundreds of people, renew countless friendships, and sell thousands of bulbs and seed packets. Over the years, from our founding right up to the present, our fortunes and MOFGA's have been inextricably linked. Those who attended the first fair at Unity got a glimpse of how far MOFGA has already come in realizing its dream of a year-round home for the Fair and other educational events, as well as an appreciation of how much more still could be done to finish the $3 million project. Fedco has pledged $20,000 over five years. You can help us meet that commitment. On the bottom of the totals page of your order form we have left a line for making an optional donation to MOFGA's Permanent Home Campaign. For an even more painless way to contribute, direct us to donate all or part of your refund to the campaign on the designated line on the totals page.

RESOURCES

The Seed Savers Exchange, 3076 N Winn Rd, Decorah, IA 52101, founded by Kent & Diane Whealy, is a grassroots network of gardeners and plant collectors who maintain and distribute rare varieties of food crops. Their 1998 Yearbook listed 991 members who maintain a combined collection of over 11,000 heirloom vegetable varieties. Over the past seven years the SSE has purchased the 170-acre Heritage Farm where they house their own collection of 18,000 varieties including 4,100 tomatoes, 3,500 beans, 1,200 peppers, 950 peas and more. Annual membership is $30. The **Flower and Herb Exchange**, whose members maintain over 1000 varieties of heirloom herbs and flowers, is at the same address. Annual membership in FHE is $10.

The Scatterseed Project, Box 1167, Farmington, ME 04938, is a regional seed exchange for this area and curator for a substantial part of the SSE collection. They do not have a catalog; all varieties are available through SSE. Scatterseed maintains around 1,060 varieties of peas and 650 of potatoes among its over 3,000 plant varieties. See page 72 for a vignette of Will Bonsall, the seed saving genius extraordinaire behind Scatterseed.

The Maine Seed Saving Network, PO Box 126, Penobscot, ME 04476, promotes and preserves the genetic diversity found in open-pollinated varieties and helps maintain public access to these varieties through active production and distribution of seeds and information about saving seeds. Annual membership is $10 for students/low income, $15 general.

Butterbrooke Farm Seed Co-op, c/o Thomas Butterworth, 78 Barry Rd. Oxford, CT 06478-1598, is a seed savers cooperative in Connecticut which publishes a newsletter and has a seed exchange. Send a SASE for more information. Annual membership is $15.

Garden State Heirloom Seed Society, c/o Joe Cavanaugh, PO Box 15, Delaware, NJ 07833, is a seed savers organization in New Jersey with a seed exchange, a magazine and a catalog of over 1000 listings. Some members have marvelous tomato collections and they hold a tomato-tasting in September. Annual membership is $10.

Seeds of Diversity Canada, PO Box 36, Station Q, Toronto, ON M4T 2L7, Canada, (905) 623-0353, is a living gene bank seeking to preserve and enhance genetic diversity and sponsoring an annual seed exchange program. Annual membership is $25; $20 for fixed income.

MOFGA (Maine Organic Farmers and Gardeners Association), PO Box 2176, Augusta, ME 04338, (207) 622-3118, works to promote sustainable agriculture through legislative and educational initiatives, annual sponsorship of the Common Ground Country Fair, publication of its quarterly newspaper, and sponsorship of a farm apprenticeship program and a community gardening program. Maintains local chapters.

NOFA (Northeast Organic Farming Association) c/o Julie Rawson and Jack Kittredge, 411 Sheldon Rd, Barre, MA 01005, (978) 355-2853. For the rest of the Northeast what MOFGA is for Maine. Maintains state chapters in VT, NH, MA, RI, CT, NY and NJ (also serves PA). Sponsors educational conferences each summer and winter, and publishes a quarterly newspaper. Of particular interest were special supplements on seeds in their Winter 1995-1996 issue and on tomatoes in their Fall 1996 issue.

The USA Pure Food Campaign, email is PDines@compuserve.com, website at http://www.purefood.org, has information on genetically engineered processed and whole foods. Use PFC to keep up-to-date on genetic engineering, life-form patenting, factory farming and other food safety issues.

Annual membership rates for MOFGA and NOFA. You can join when you order; list names and addresses on a separate sheet, indicate new membership or renewal, add total on order form.

state	individual	family	supporting	other	
ME	25	35	60	15	student/elder
VT	25	35	75		
NH	25	35	100		
MA	30	40	100	20	low income
RI	25	35	55	15	student/senior
CT	35	35	100	20	low income
NY	25	30	100	15	student/senior
NJ	25	35	50	15	low income

The Bio-Dynamic Farming & Gardening Association, PO Box 29135, San Francisco, CA 94129. Sponsors annual conference on topics of interest to biodynamic growers, maintains a nationwide CSA directory, call (800) 516-7797, publishes a bimonthly journal and the annual Stella Natura Calendar (See **#6690** in our books section).

Small Farmer's Journal, PO Box 1627, Sisters, OR 97759. Published quarterly, $7.00 per copy, $24.00 for a year's subscription. The antithesis of those slick, superficial gardening magazines, this meaty publication is aimed at serious horse farmers but will appeal to anyone seeking iconoclastic political observations, in-depth treatments of rural economics, liking to tinker with machines (has the best equipment drawings of any publication I've seen) or appreciating fine craftsmanship.

Growing for Market, PO Box 3747, Lawrence, KS 66046, (800) 307-8949, published monthly, year's subscription is $27. Here's where we turn for practical information about organic food and flower production for market, good coverage of CSA and other timely topics.

Terminator Technology

On March 3, 1998, Delta & Pine Land Co. (the world's largest cotton seed company with a 73% share of the U.S. market) and the USDA received U.S. patent #5,723,765 for a new genetic technology designed to render seed-saving by farmers impossible. Dubbed the "Terminator Technology" by the Rural Advancement Foundation International (RAFI), it would enable seed companies to create genetically altered varieties programmed by their DNA to kill their own embryos, producing sterile seed.

Although it has been tested so far only on cotton and tobacco, it is believed to have broad application to the seeds of all species, including self-pollinators which reproduce true to type. The world's two largest food crops, rice and wheat, as well as several others of great importance (including soybeans, oats and sorghum), are self-pollinated. The ease of saving seed from these crops has kept control of the seed in the hands of farmers and mostly out of commerce until now. That could change dramatically if Terminator Technology reaches the marketplace.

According to RAFI, USDA spokesperson Willard Phelps said the agency "wants the technology to be widely licensed and made expeditiously available to many seed companies" so as to "increase the value of proprietary seed owned by U.S. seed companies and to open up new markets in second and third world countries." Molecular biologist Melvin J. Oliver, its primary inventor, justified it as a "way . . . to protect the technology of patented seed." The patent holders have targeted 87 countries, many in the developing world or the economically ravaged former Soviet Bloc.

The USDA, which 100 years ago donated seed to farmers, invested almost $200,000 of taxpayer money on the Terminator Technology, and stands to make royalties of about 5% of any net sales. The little-known Technology Transfer Act of 1986 allows such arrangements and these days the agency is collaborating in all sorts of creative ventures with the private sector, helping develop a roster of ideas and products that would do credit to the most off-the-wall sci-fi writer.

Only nine weeks after the release of the Terminator patent, Monsanto announced the purchase of Delta & Pine, as well as the takeover of DeKalb Genetics (the nation's 2nd largest maize company), the Cargill International Seed Division and Plant Breeding International, capping an $8 billion acquisitions spree in only two years. The new takeovers made Monsanto the dominant player in the U.S. maize market (15% share), soybean market (33% share) and cotton market (85% share!). Even though American Home Products Corporation's proposed $33.9 billion buyout of Monsanto recently fell through, The New York Times speculated that more mergers might be in the works for Monsanto, including possibly one with agribusiness giant Novartis. The recent consolidations spearheaded by the genetic engineering revolution leave the ten largest firms in control of 30% of the world seed trade. Monsanto's 75+% share of the 65 million acres of genetically engineered crops grown worldwide in 1998 may be an even more accurate representation of the degree of concentration in the industry. The global market for genetically engineered seeds is expected to increase tenfold over the next decade.

Terminator may be understood as the final step in the transition from a land-based farmer-controlled system to a capital-based business-dominated system. With the Terminator, total control of the seed will have passed from the farm to the mega-corporation. From the development of hybridization in the 1920s to the passage of the seed patenting law in 1970 to Monsanto's restrictive licensing agreements of the 1990s (which required farmers to give up their right to save, replant, or transfer any seed from their Roundup Ready crops) to the Terminator Technology of the milennium, we have been traveling along the same continuum. Each step made it harder to save seed and took power and control out of the hands of the growers and into the corporations. Even if we can stop the commercialization of the Terminator we still must contend with the economic consequences of transgenics—huge corporations run amok with unrestrained greed, unsafe genetically engineered varieties spreading across the countryside like a wildfire out of control. In just two years genetically engineered field corn has increased from almost none of the crop to over a third. And sweet corn is next!

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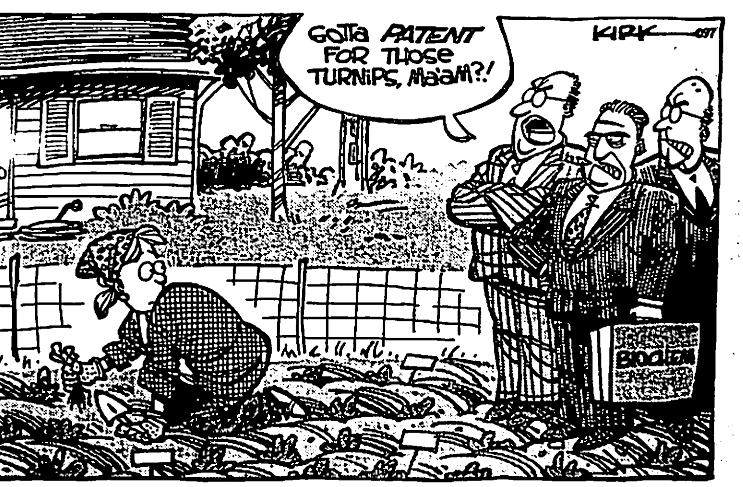

GOTTA PATENT FOR THOSE TURNIPS, MA'AM?!
KIRK
BIOCHEM

5,723,765 SEEDS

We have created a seed that cannot recreate.

Engineers of genes behind the closed doors of laboratories
within the microcosmic complexity of DNA.
We claim to unravel Nature's wisdom.

Claiming to be of Age.
The "Age of Mastery."
Masters of our own demise.

In mental and physical isolation
those who "create" and sell the seed
are not those who plant the seed
are not those who see the soil
who see the land
who know the land where the seed is planted.

Yet we all live upon this land.
We are all fed from this land.

Isolated within the constructs of scientific inquiry,
technology, intellectual property and capitalist greed.
Agribusiness, Life Industry erects structures from which our culture
and society will hang itself.

I will not allow a quiet execution and destruction of the
seed upon which life depends.

I will counter the destructive monopoly by scattering
seeds of knowledge and inspiration.
I will plant seeds and
I will save seeds.
And I will teach anyone who wishes to do the same.

We can cultivate the essential creativity of life
with the seed.

Nedda Jastremsky
April 5, 1998

Nedda Jastremsky managed the 1998 Hampshire College trial gardens and grew out 55 varieties of heirloom tomatoes.

HONORING SEED SAVERS

Standing in stark contrast to the Terminators, whose work would concentrate all seeds in the hands of one corporation, is the labor of the dedicated seed savers and collectors who strive to disseminate our genetic heritage to all who would grow it and keep it alive. Seed scatterers are real heroes of our time. Think of how many of the best varieties in this catalog might now be lost forever were it not for the work of those we honor and of others like them. Think how impoverished we would all be. There *is* an alternative to the deadening technology of the Terminator. It stands before us, and it is all of us.

Thanks to Aaron Whealy of the Seed Savers Exchange for his help providing information on Ben Quisenberry (see page 40) and John Withee (p. 11). Thanks also to Glenn Drowns (p. 23), Mary Schultz (p. 30) and Will Bonsall (p. 72) for making themselves available for telephone interviews. Other sources include Breed Your Own Vegetable Varieties by Carol Deppe, The Heirloom Gardener by Carolyn Jabs, The First Ten Years, 1975-85, compiled by the Seed Savers Exchange, and their Harvest Editions, 1985-87, 1990, 1992 and Yearbook, 1997.

Also see page 16 for a profile of vegetable breeder Gerald A. Marx.

Customer Service and Information

For all inquiries, call our office at (207) 873-7333,
or fax us at (207) 872-8317.

Call us Monday-Friday, 9:00am-5pm, December-April,
Saturday, 10 am-noon, January-March.

We are also available at irregular hours the rest of the year. If you don't get a live person, please leave a message on our answering machine.

We will answer your questions or transfer you to someone who can. Please do not call our warehouses.

Please don't call us if you get a few packets of the wrong seeds, or are missing a few packets. Instead please mail us the correction form which comes with your shipment. If you are missing a major piece of your order or get someone else's order, please call the office.

Changes for 1999!

•WE'VE ELIMINATED THE VOLUME DISCOUNT DEADLINE, but the discounts remain unchanged. All orders over $100 qualify.

•WE'VE ELIMINATED THE $3 HANDLING CHARGE for small orders.

•WE'VE INSTITUTED A $2 HANDLING CHARGE for faxed seed orders and will confirm all fax orders by phone.

•WE'VE CREATED A NEW 2% DISCOUNT for earlybird mail orders received by Jan. 30. Fax orders are not eligible.

•WE HAVE A NEW MINIMUM ORDER of $5 for seeds and books.

•WE'VE EXPANDED OUR EZ ORDER FORM TO include up to 59 items.

•WE'VE ADDED A SIXTH SIZE (K) for larger quantities of many vegetables, and a fourth size (D) for herbs.

How to Order Seeds & Books

If we are new to you, or if you desire to refresh your memory about us, please see the Fedco primer on page 2.

All orders must be on one of our 1999 order forms. Use the EZ order blank in the centerfold to order 59 items or fewer. For 60 or more please use the large grid order form. **Please, no lists.** All orders must include check, money order or credit card information. We do not accept food stamps. All orders must reach us by Fri. Mar. 19.

Mail us your order. Send to Fedco Seeds, PO Box 520, Waterville, ME 04903.

Fax us your order to (207) 872-8317. For more details please see page 2. Please use one of our order forms. Fax orders must enclose credit card number and expiration date and pay a $2 handling charge to offset our extra processing costs. Fax orders are not eligible for earlybird discount.

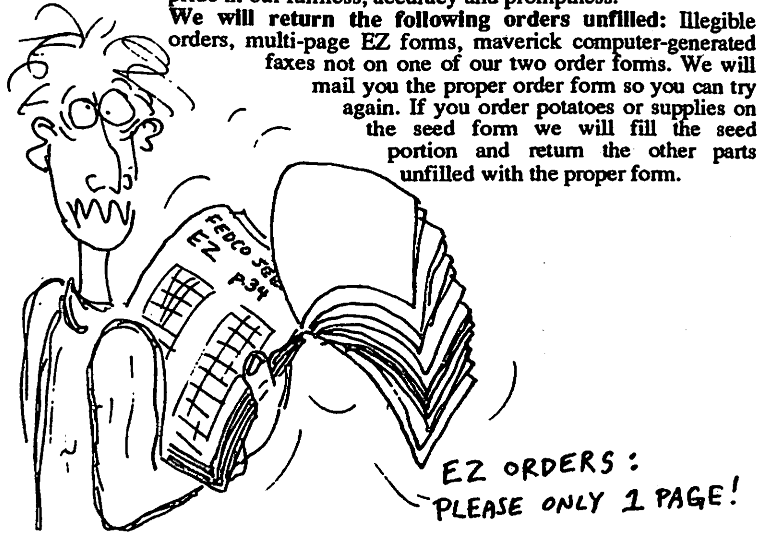
We accept VISA and MasterCard. We will bill your card at the time we receive your order. All adjustments and refunds will be by cash. To reduce our processing costs, all orders under $25 please pay with check or money order.

How Not to Order

Sorry, we do not accept telephone orders. These entail extra staffing costs and too many inaccuracies.

Sorry, we do not have a rush order service. We fill all orders in the order in which we receive them. We pledge to continue to reduce turnaround time for all orders. We take pride in our fairness, accuracy and promptness.

We will return the following orders unfilled: Illegible orders, multi-page EZ forms, maverick computer-generated faxes not on one of our two order forms. We will mail you the proper order form so you can try again. If you order potatoes or supplies on the seed form we will fill the seed portion and return the other parts unfilled with the proper form.



EZ ORDERS :
PLEASE ONLY 1 PAGE!

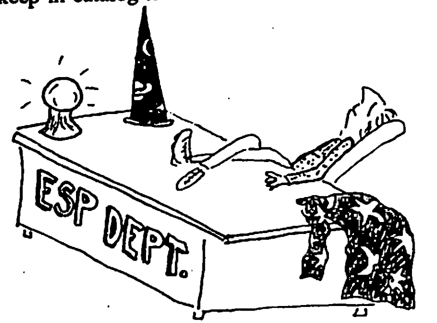
Which form for you?

Seeds has two order forms.

Our grid form was designed for group and large individual orders. It makes computing order totals easy and eliminates the need for writing anything other than the number of packets wanted for each item and size. We recommend it if you are ordering many large sizes and ask that you use it if you are ordering more than 59 items. It uses a lot of paper, but saves us many hours on large orders. If you need one or more grids, please call, write or fax us.

Our EZ form in the center of the catalog was designed for small and medium individual orders. It is similar to other seed companies' order blanks, except it does not have space for the item name. You write only the catalog number and size, saving writer's cramp while enabling us to collate, pull and invoice your order without turning the paper or flipping pages. Please don't send us multi-page EZs. They require us to turn pages, and almost no one computes the math correctly.

Last year 1 in every 170 items ordered on an EZ was for a non-existent catalog number or size. We suggest you go through the catalog, circle the numbers and sizes you want in colored ink; then fill out your EZ in catalog number order. Be very careful to fill in the correct number, and please double-check. The most common error is to transpose the catalog number digits, but if you keep in catalog number order we can catch and right these errors.



PLEASE DOUBLECHECK YOUR
CATALOG NUMBERS. KEEP OUR
ESP DEPARTMENT UNEMPLOYED.

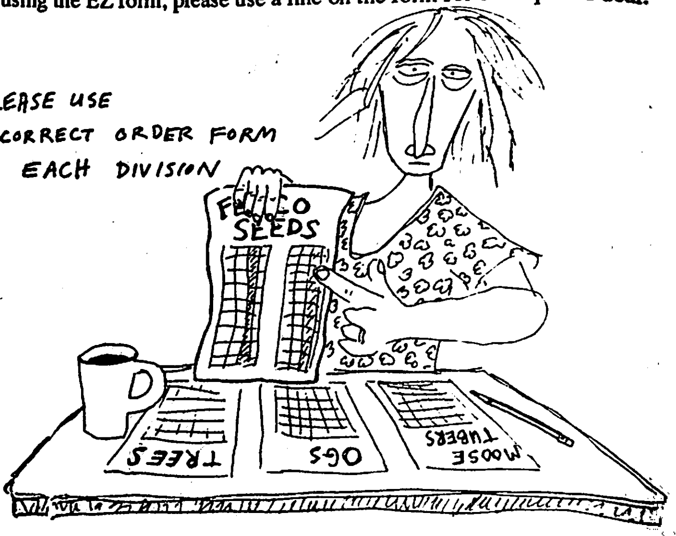
Services for Group Orders We offer several services for group orders. 1) We enclose forms for collating and pricing EZ orders. 2) We separate all orders over $300 by sections when we pull and package them. 3) Coordinators of large group orders may take advantage of our 7% solution. In exchange for 7% of your order total we will collate, pull, package and invoice your individual orders separately and make one shipment to you. Please call the office for more information.

Individual Orders Are Welcome, Too! You don't have to be a member of a group or cooperative to order from us. Individual orders are welcome and comprise more than half of our 5,000 seed orders annually. Our EZ form is customized for these orders.

Bulk Orders of Seed

For 1999 we have added a sixth size (K) for many vegetables varieties and a fourth size (D) for herbs. Prices and quantities are listed in the catalog and on the grid order form. For quotes on significantly larger quantities (bulk) please call CR Lawn at (207) 873-7333. Prices for 50 lb. bags of peas and beans, and for larger sizes of a few other commodities, are listed in the catalog but not on the grid order sheet. To order 50s or bulk, attach a separate sheet to your grid order form and enter total on page 1 under "bulk seed orders." If you are using the EZ form, please use a line on the form for each quoted deal.

PLEASE USE
THE CORRECT ORDER FORM
FOR EACH DIVISION



Deadlines

Orders received by:	qualify for:
Fri. Jan. 15	Early pickup.
Sat. Jan. 30	Earlybird discount, mail orders only.
Fri. Feb. 12	Regular March pickup.
Fri. Mar. 19	Final order deadline.

Please don't procrastinate. We handle orders by the date they're received, not the date they're postmarked, and the postal service can be quite slow. Here are last recommended days to mail your order to reach here by Friday:

049 zip	mail by Thursday
elsewhere in Maine	mail by Wednesday
New England, NY	mail by Tuesday
outside NE, NY	mail by Monday

Shipping & Handling Charges

Free shipping on all orders (except to Alaska, Hawaii and APO/FPO; please pay 15% extra). Sorry, we can't ship to Canada. We welcome our neighbors in New Brunswick and Quebec to come pick up.

Fax orders for seeds and/or books pay $2 handling charge.

Discounts

All discounts are figured from the subtotal on your order sheet.

Volume discounts:

Orders over $100 deduct 10%
Orders over $200 deduct 15%
Orders over $300 deduct 20%
Orders over $600 deduct 22%
Orders over $1000 deduct 24%

Pickup discount of 10%: Orders must be picked up in our warehouse at one of the designated pickup times (see Delivery Options for details).

Organic grower discount: Members of MOFGA, NOFA, PASA or a comparable organic growers organization receive a 1% discount regardless of ordering date. You need not be certified organic or a commercial farmer to take the discount, and you may join MOFGA or NOFA with your seed order. See page 4, Resources, for dues.

Earlybird discount: All mail orders received by Sat. Jan. 30 deduct 2%. Fax orders do not qualify.

Sales tax

Maine residents pay 5.5% on flower seed and books. These items are highlighted on the totals page of the long grid order sheet. **Please do not charge yourself sales tax on vegetable and herb seed.** Maine farms and retailers: Send us your state resale ID number.

There is no sales tax on anything for folks outside of Maine.

FEDCO
CORN SEED
PEA SEED

NO SALES TAX ON
VEGETABLE AND HERB SEED
AND ON OUT-OF-STATE ORDERS !!

Delivery options

On your order form, please designate how you want to get your seeds. The choices are as follows:

UPS/Priority Mail We ship via UPS ground or USPS Priority Mail; our choice, based on weight. We pull and ship orders as they are received according to their *arrival* date, *not* their postmark date. If you'd like us to hold your order for a later shipping date, please attach a note to your order form.

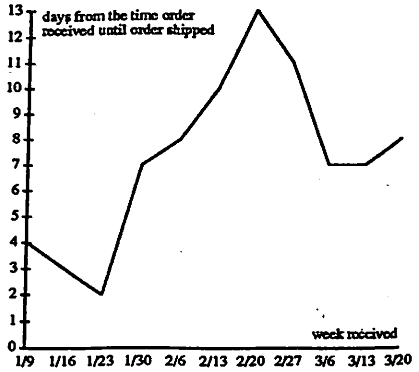
Shipping schedule

Orders received in:	We will ship:
December	beginning Jan. 8.
January	within one week of receipt.
February	within two weeks of receipt.
March	within one week of receipt.

Please allow an additional week for mailing and shipping time.

Our aim is to meet or beat our shipping schedule. Early and late orders receive the fastest service, often going out within a few days of receipt. Orders received during peak season in February go out the slowest. Later orders run a greater risk of out-of-stocks where seed crops come in short or where demand exceeds our estimates.

Many orders, especially early ones, will require one or more additional shipments because not all items will be in stock at the time of the first shipment. We will send invoices with the first shipment. We will make payment adjustments, including refunds for items still missing, in the final shipment. We will send all final shipments by Fri. Mar. 26.



PICKUP Come to our warehouse in Clinton. See the map on page 79.

Early pickup Pick up your order Thurs. or Fri. Jan. 28-29 from 9:00-4:30. Sorry, the warehouse is not open for pickups any other days until March. We must have your order in hand by Fri. Jan. 15. We estimate that we will have 85-90% of your order ready at early pickup. You may return for the rest of your order in March, or we can ship it to you.

Regular pickup You may pick up your order Wed-Fri. Mar. 3-5 or Mon.-Fri. Mar. 8-12 from 9:00-4:30. No weekend pickups. We must have your order in hand by Fri. Feb. 12.

Late pickup for orders received after Feb. 12. Pick up during the Moose Tubers pickup, Thurs-Fri, Apr. 8-9, 9:00-4:30, or Sat. Apr. 10, 9:00-noon or at the Fedco Tree Sale, Fri-Sat-Sun, Apr. 30-May 2, 9:00-3:00. Late orders will not be available for pickup in March.

TRUCK Michael Gulick trucks certain large Vermont and New Hampshire orders during February and March. Contact Michael at (802) 525-3800 by January 15 to arrange this service .

Repeat Orders

A number of our customers place multiple orders each year. Whatever the reason—members turning in orders to their coop late, or items being overlooked and not ordered—we treat your second order as a separate order the same as any other order. We do not combine it with an earlier order.

Repeat orders over $50 continue to qualify for the same volume discount as the first order, provided they are to be sent to the same address.

Baa! (ckorders)

We know that you desire your seeds shipped promptly, preferably all at once with no backorders at all. Our goal is to reduce backorders to a minimum. We hope we will have many fewer backorders in 1999 than in 1998. Unfortunately, most backorders are outside our direct control, avoidable only if our suppliers make timely deliveries. Our products are alive, subject to the vagaries of weather. Many varieties have only one supplier. Because seeds must move quickly through harvesting, conditioning, testing, shipping to us, repackaging and pulling to get to you on time, we will never be able to completely eliminate backorders. The earlier we ship your order, the more likely one or more items will arrive too late to make the initial shipment. Most UPS orders can expect to receive one or more backorder shipments.

We ship backordered items that need an indoor start as soon as possible after arrival. We hold other backorder items until we have a sufficient quantity to ship to a whole cycle of orders. Compared to customized service of one packet at a time, we save time and money, reduce the number of shipments and cut our turnaround time on first shipments for all orders. Please be patient; your direct-seeded backorder items will probably arrive several weeks or more after your first shipment.

We promise to ship all backorders by Fri. Mar. 26. If you are still missing anything by Apr. 5 and have not received a refund, please contact us ASAP.

Our Mailing List

We share peoples' concern about the proliferation of junk mail, and we do not want to be a part of the problem. If we are sending you too many catalogs, let us know so we can save both trees and money.

From time to time we receive requests for parts or all of our mailing list. We never give out such information without your prior permission and we never give out the names of people who've asked for our catalog but have not yet ordered from us.

We commonly receive requests from individuals seeking other folks or established coops with whom to order. Less frequently, like-minded organizations ask us to trade names.

On the front of the order form is a place for you to indicate when, if ever, we have your permission to give out your name. Please tell us if we can give your name to other businesses or organizations, and/or to individuals seeking to form an ordering group or coop.

How You Can Get More Involved

Tell us how our varieties performed for you. Did you especially like something? Was something disappointing? Let us know. Tell us why. Please include the specific variety and lot number. The more details you furnish, the more we can learn.

Suggest new varieties for us to carry. Be these heirlooms which have been rediscovered, new varieties from modern breeding programs, or old standbys we've overlooked, your suggestions always interest us. The more specific your opinion, the more useful to us. And please tell us whose seed you've been using.

Join our network of trial gardeners. We are interested only in experienced successful gardeners with good record-keeping skills. We discourage organic purists because often trial samples have been fungicide-treated by the supplier. For 1999 we especially need trialers of broccoli, brussels sprouts, cauliflower, Jack O'Lantern pumpkins, supersweet corn, and overwintering lettuce and greens.

Send us seed of an heirloom variety which you think has commercial potential. We will grow it out to see if we agree. Our Cracoviensis Lettuce, Cavolo Palmizio and new Blue Beech paste tomato all resulted from this type of collaboration. Vegetable varieties must ripen in our short growing season, with outstanding taste and/or appearance. We especially welcome samples of neglected herbs or flowers such as single hollyhocks and old-fashioned scented sweet peas.

Send us your old seed catalogs or old classic references. We collect seed catalogs before 1970 and old garden books, especially those with good black-and-white drawings. They enhance our catalog with historical references and illustrations.

To Our Friends in Warmer Climates

We are located in Zone 4, where we have about 100 frost-free days.

We've begun to receive requests for varieties and growing information for areas other than the Northeast. Because all our experience is in cold-climate gardening, and because we see ourselves as primarily a regional seed company, we have chosen to keep our focus on what we do best.

We will continue to limit our selections to proven performers in our cold climate. We won't recommend overwintering varieties which can't survive our cold winters, even if they can make it through in regions with more moderate winters. Nor will we address problems caused by pests such as squash vine borer which are not prevalent in our area nor do we feel qualified to give advice about which varieties can be sown in early spring south of the Mason-Dixon line.

Many of our selections, including some rarely offered by other seed companies, thrive outside of our own region. We welcome your orders from the South, Southwest, Midwest and Pacific Northwest. We suggest you find a supplementary regional seed source for varieties and information appropriate for your locale that are missing from our catalog. Thanks for your support.

Seeds People

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Seed Catalog, Finance and Inventory Control: CR Lawn
Office Coordinators: David Shipman, Susan Kiralis
Outreach: Joanna Linden
Office Crew: Bria Sanborn, Jerusalem Walker
Packing and Germination Testing: Roberta Bunker
Purchasing and Research: Nikos Kavanya
Shipping: Alison LaCourse
Warehouse Crew: Gary Athenian, Paula Fulford, Lou Johnson, Tom Levesque, Bernice Nadler, George Stewart, Ann Wilson

Catalog Credits

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Seeds copy & Cultivar selection: CR Lawn, Nikos Kavanya
Moose Tubers copy: Alison LaCourse
OGS copy: David Shipman
Editing: Susan Kiralis
Proofreading: Joanna Linden
Typesetting: David Shipman
Layout: John Bunker, Gene Frey, many thanks to Huey and Mac

> Have you reckoned the landscape took substance and form that
> it might be painted in a picture?
> Or men and women that they might be written of, and songs
> sung?
> Or the attraction of gravity and the great laws and harmonious
> combinations and the fluids of the air as subjects for
> the savans?
> Or the brown land and the blue sea for maps and charts?
> Or the stars to be put in constellations and named fancy
> names?
> Or that the growth of seeds is for agricultural tables or
> agriculture itself?
>
> *A Song for Occupations*
> Leaves of Grass, 1855

Fedco Seeds guarantees that all items we offer are fully satisfactory. If you are dissatisfied for any reason, we will either replace the item or refund the purchase price.

Limitation of Liability

Because good results depend upon weather, soil and cultural practices over which we have no control, we limit our liability in all instances to the purchase price of the seeds, as is customary in the seed trade. The liability of Fedco Seeds for breach of warranty, or any loss or damages arising out of the purchase or use of our products, including loss or damages resulting from any negligence whatsoever on our part, or strict liability in tort, shall be limited to the purchase price. By acceptance of the merchandise, the buyer acknowledges that the limitations and disclaimers herein described are conditions of sale, and that they constitute the entire agreement between the parties regarding any warranty or liability.

Claims for defects in Fedco Seeds' products should be presented to Fedco Seeds as soon as possible after discovery. Failure to assert claims within 30 days after discovery renders this warranty null and void.

New Seed Varieties for 1999

208 Black Valentine: You may be old, but you're still my Valentine!
210 Strike: Strike it rich with this market favorite!
402 Benchmark: Sets the standard for taste in green beans!
415 Fortex: Long, fancy *Haricots verts* on a pole!
480 Packers: These Packers won the lima superbowl!
488 Shirofuma: This edible soy is the real McCoy!
682 Roy's Calais Flint: We think Roy was a pretty Fair judge of corn!
724 Knight: No white mildew on his shining armor!
984 Sunsweet: An oval treat that can compete!
1020 Sweetie #6: Might just be your #1 sweetie in the garden!
1130 Garden Baby: This baby saves a lot of space!
1360 Boothby's Blonde: This Maine blonde is more fun!
1402 Eight Ball: You'll be behind the eight ball if you miss this cue!
1406 Spineless Beauty: For a harvest rich without an itch!
1754 Colored Crowns: Gourd fit for a queen!
1768 Speckled Swan: This bird's no ugly duckling!
1810 Festival: Fine on the eyes and a feast for the tongue!
1956 Long Pie: The best pie pumpkin returns to Maine!
2252 Plum Purple: Purple on the outside, white on the inside & sweet all over!
2674 Firebird: Radicchio of lovely plumage!
2776 Winter Marvel: In the cold, can grow old; in the heat, better eat!
2826 Antares: For lettuce folk liking leaves of oak!
2860 Hyper Red Rumple Waved: The reddest lettuce on our list!
2915 Forellenschluss: These freckles might win the beauty contest!
3042 Charlotte: It won't be hard to love this chard!
3760 Pretty in Purple: Devilishly colorful these little bombs!
3824 Sweet Havana: Cuba is known for more than ballplayers and cigars!
3844 Amish Pimiento: Welcome to your next addiction!
3877 Jalapeno Blanco: If you like your stuffing peppers a little hot!
4056 Rutgers: This scarlet knight has stood the test of time!
4062 Jubilee: Celebrate its superb orange flesh!
4196 Amish Paste: 37 seed savers can't be wrong!
4197 Hog Heart Paste: You'll happily wallow when this sauce you swallow!
4198 Blue Beech Paste: You'll make haste to embrace this paste!
4449 Sweet Dani: If vigor you seek, this one's no lemon!
4734 Wild Bergamot: A good bet if you need to sweat!
4742 Boneset: With #4964 makes a famous Yale secret herbal society!
4900 Great Mullein: Dickens would have liked it: Great expectorations!
4986 Blue Vervain: You won't feel stress or strain if you grow Blue Vervain!
5050 Black Ball: You'll regret it if you blackball this one!
5147 Moldavian Dragonhead: These fangs don't bite!
5148 Kilimanjaro: For a euphorbic color experience!
5236 Troubadour: Merry minstrel of garden yellow!
5270 Flying Saucers: We interrupt this catalog to inform you that Martians...
5330 Danish Flag: This heirloom poppy shows the colors!
5440 America: The Beautiful!
5461 Zulu Prince: African daisy with color crazy!
5468 Blue Point Mix: You won't get the blues with these gaudy blooms!
5518 Nonstop: Just like the Saturday traffic outside Common Ground Fair!
5520 Kiwi Blue: As the cold creepens, the color deepens!
5570 Flower of the Hour: A bloom a day keeps boredom away!
5573 Daybreak Mix: Morning has broken, like the first morning!
5623 Datura: Grow me, sniff me, eye my bloom, if you eat me spell thy doom!
5665 Rocket Mix: Your sales will take off like a rocket!
6138 Aunt Rose's: A rose by any other name is a hollyhock!

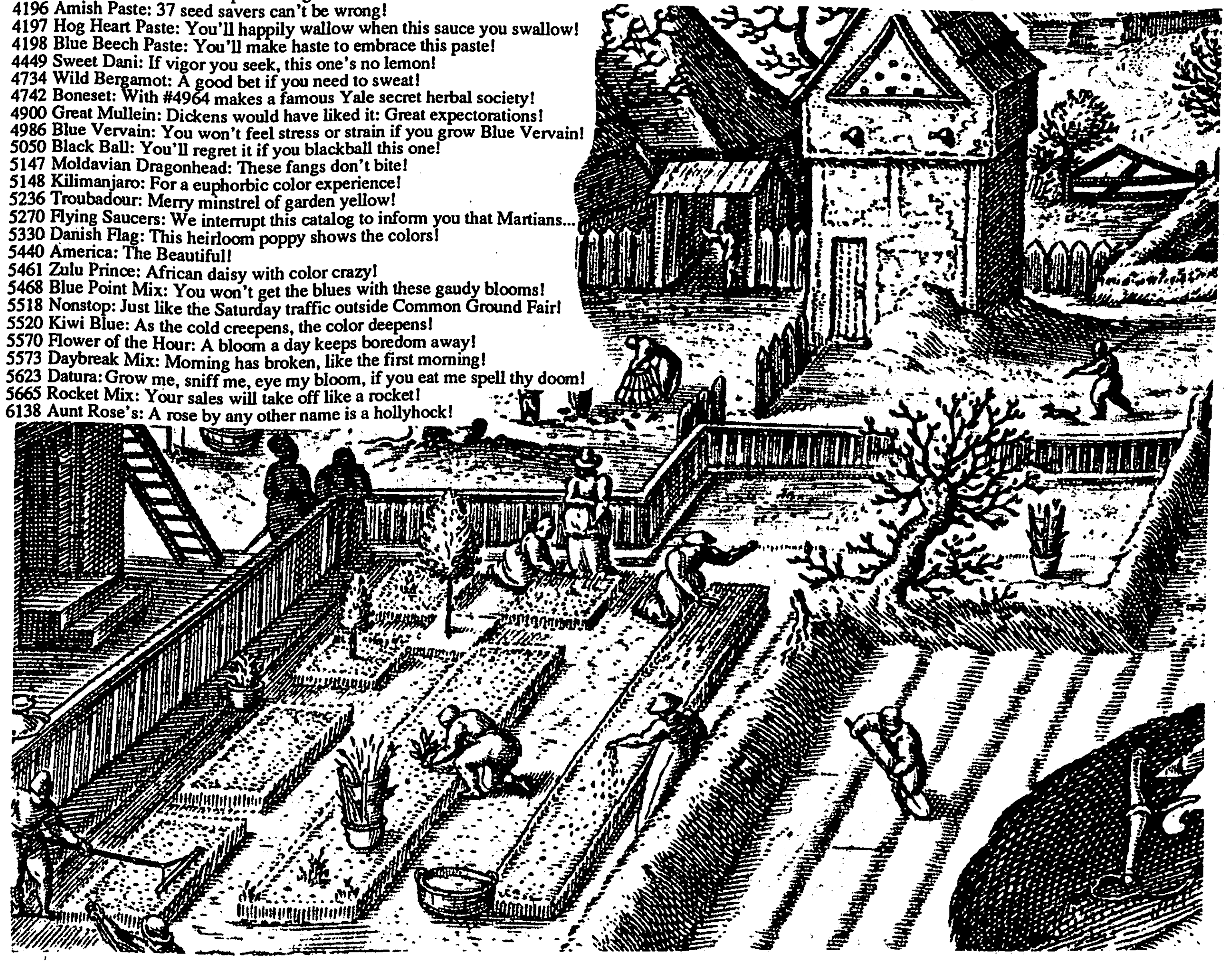
Dropped Varieties for 1999

415 Emerite: Replaced by #415 Fortex.
462 Hutterite: Crop failure. We hope to have back in 2000.
488 Tohya: Replaced by #488 Shirofuma.
610 Burgundy Delight: Its only grower ceased production.
772 Miragreen: No longer in commercial production. We hope to have again.
926 Golden Gopher: Crop failure. We hope to have back in 2000.
1892 Green Hokkaido: Crop failure. We hope to have back in 2000.
2146 Burpee's Golden Beet: Crop failure. We hope to have back in 2000.
3008 Hopi Red Dye: Crop failure. We hope to have back in 2000.
3422 Emperor: Its only grower ceased production.
3960 Orobelle: Its only grower ceased production.
4190 Grandma Mary's: Crop failure. We hope to have back in 2000.
4656 Rosemary: No crop available. We hope to have back in 2000.
5404 Floristan: Replaced by #5668 Prado Red.
5736 Chinese Lantern: No crop available.
5750 Qis Red Globe: Crop failure. We hope to have back in 2000.

Last Chance in 1999 Available for the last time!

3452 Green Valiant: The only grower is discontinuing production.
3930 Valencia: The only grower is discontinuing production.
5238 Lemondrop Marigold: Being replaced by Troubadour #5236.
5558 Figaro Dahlia: To be replaced by a better cultivar.
6822 Express: The only grower has discontinued production.
6833 Kinko 6": Seed is no longer available to us.
6834 Estelle: The only grower has discontinued production.

A number of other items are in discounted specials. See page 69. Some of these are in short supply temporarily because of crop failures. Others we plan to drop in 1999 because we have found a superior replacement or because sales have been too slow to justify continuing them.



Variety Descriptions by CR Lawn - As indicated in the descriptions, some of our selections are more suitable for home gardeners than commercial growers. Farming/gardening is more an art than a science, with many factors, especially your microclimate, soil type and cultural practices, significantly affecting performance. Success in our trials is not a guarantee of success in your plot. We advise market growers to trial unfamiliar varieties on a small scale before making a full commitment.

As a guide to growers we've included information about disease tolerance/resistance provided by our suppliers. We are not plant pathologists and cannot guarantee that tolerant or resistant cultivars will never be harmed. Actual performance in the field depends on climate, weather and cultural practices which we cannot control. In particular, the absence of information on the older varieties does not mean they will keel over at the first sign of stress. While conscious breeding for disease tolerance/resistance began relatively recently, cultivars which have stayed around for generations have proven adaptable to a variety of conditions. Following are abbreviations which appear after some variety descriptions. A number after the abbreviation indicates which race of pathogen.

ALS	Angular Leaf Spot	LMV	Lettuce Mosaic Virus
ALTS	Alternaria Leaf Spot	N	Nematodes
ASC	Alternaria Stem Canker	NCLB	Northern Corn Leaf Blight
ANTH	Anthracnose	NY 15	NY 15 Mosaic Virus
BR	Black Rot	PEMV	Pea Enation Mosaic Virus
BSR	Bacterial Soft Rot	PLR	Pea Leaf Roll
BS	Bacterial Speck	PS	Peronospora
CBMV	Common Bean Mosaic Virus	PY	Potato Y virus
CLS	Cercospora Leaf Spot	PM	Powdery Mildew
CMV	Cucumber Mosaic Virus	S	Semphylium
CTV	Curly Top Virus	SEPT	Septoria Leaf Spot
DM	Downy Mildew	ST	Stewart's Wilt
F	Fusarium	TEV	Tobacco Etch Virus
FY	Fusarium Yellows	TMV	Tobacco Mosaic Virus
GLS	Grey Leaf Spot	V	Verticillium
GSB	Gummy Stem Blight	W	Common Wilt race 1
LCV	Leaf Curl Virus	YBM	Yellow Bean Mosaic

The initials PVP after a variety indicate that the variety is patent protected. Unauthorized propagation of the seed is prohibited. The use of PVP in the catalog is for informational purposes only and in no way constitutes an endorsement by Fedco of plant patenting.

AAS=All-America Selection.

Prices - For vegetable seed, sizes and prices are at the end of each variety description. Prices for L=50lb bags of peas and beans are not on the long grid order form. See instructions for bulk orders of seed on p. 6.

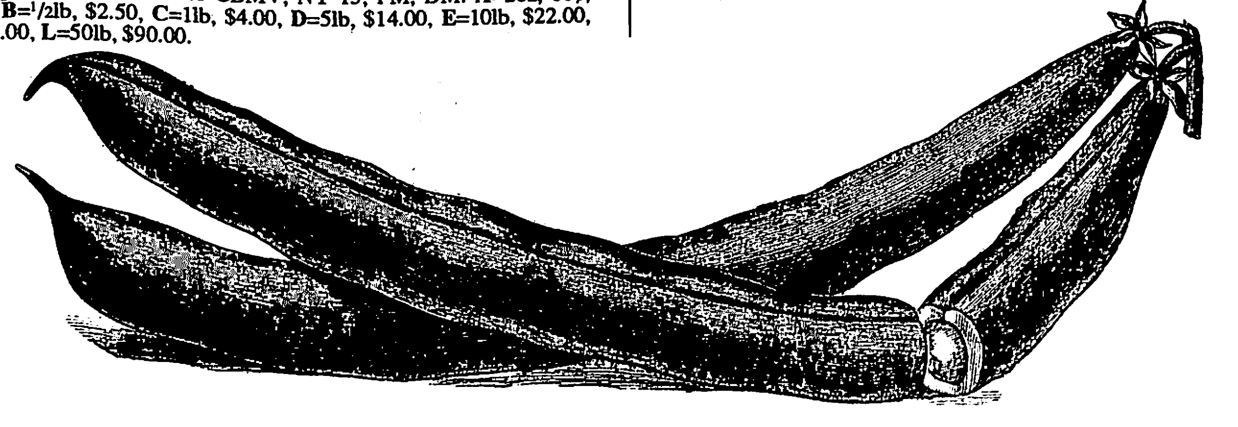
Seed Counts - Seeds per size A packet for vegetables are approximate. They are intended as guides not guarantees. Information under specific varieties is based on actual counts from 1996, 1997 or 1998 packets. Seed size and count often vary from one year's crop to the next; expect past counts to provide only a rough approximation for 1999.

BEANS *Phaseolus vulgaris*

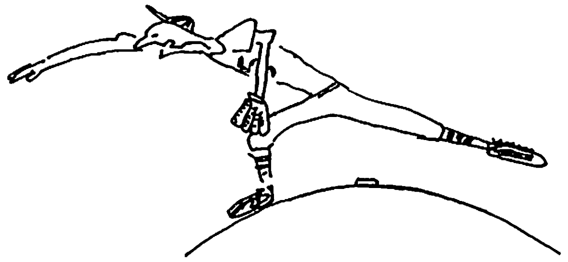
2 oz. packet sows 25 ft; 1 lb., 200 ft. Tender, will not survive frost. Plant 3-4 seeds/ft. in rows 24-30" apart. Pick frequently to keep beans producing, but stay out of the patch in wet weather to prevent spread of fungal diseases. The potato leafhoppers which devastated so many bean crops in 1997 did not recur in 1998. Almost as if to make up for the 1997 fiasco, the dry weather later in the summer helped stimulate bountiful harvests this year. Several times we got 3 lb. from one pole in a single picking. We list seed color because white-seeded beans usually don't germinate as well as dark-seeded. All beans are open-pollinated. See also **#6804.**

BUSH GREEN BEANS

204 Provider (50 days) Tied with Contender for earliest producer in our 1997 trial. For highest early yields, even under adverse conditions, and rich beany taste, old reliable Provider can't be beat. Noted for its concentrated sets of round 5-5^1/2" pods. Our best-selling bean for twenty consecutive years and some years our top seller in the entire catalog. Released by USDA in 1965. Purple seed. Resistant to CBMV, NY 15, PM, DM. A=2oz, 80¢, ~180 seeds, B=^{1}/2lb, $2.50, C=1lb, $4.00, D=5lb, $14.00, E=10lb, $22.00, K=25lb, $50.00, L=50lb, $90.00.



208 Black Valentine (52 days) When we trialed 25 bush bean varieties in 1997, including many of the old favorites, Black Valentine was a clear winner for heavy early yields and outstanding flavor. Although many 19th century varieties bore the name "Valentine," this one was introduced by Peter Henderson & Co. in 1897, damned with faint praise by U.P. Hedrick in The Vegetables of New York in 1931, yet, almost alone among heirloom bush bean varieties, retains popularity among home gardeners and canners to this day. And deservedly so, for we did not find it stringy, or the black seeds overly prominent in the pods, as charged by Hedrick. We did find it well adapted to our cool temperatures, early, loaded with sweet succulent round beans in the first picking. 6" pods with tendency to curve. Later pickings yield only moderately, succession planting recommended. Black kidney-shaped seed. NEW!, but actually at least 101 years old. A=2oz, 80¢, B=^{1}/2lb, $2.50, C=1lb, $4.00, D=5lb, $14.00, E=10lb, $22.00, K=25lb, $50.00, L=50lb, $90.00.



210 Strike (53 days) Market growers will strike it rich with heavy yields of medium-green 5^1/2" slender smooth round pods. Strike sets the standard for earliness, appearance, and ease of picking. Had a pleasing sweet beany taste in the trials. White seed. Resistant to NY 15 and CBMV. NEW! A=2oz, 80¢, B=^{1}/2lb, $2.50, C=1lb, $4.00, D=5lb, $16.00, E=10lb, $28.00, K=25lb, $65.00, L=50lb, $120.00.

214 Greencrop (53 days) An early flat-podded Romano type especially adapted to the North. Pods can grow up to 8" long while still retaining good quality. 1957 AAS. White seed. Tolerant to CBMV. A=2oz, 80¢, ~115 seeds, B=^{1}/2lb, $2.50, C=1lb, $4.00, D=5lb, $14.00, E=10lb, $22.00, K=25lb, $50.00, L=50lb, $90.00.

224 Royal Burgundy (55 days) Less foliage than Royalty Purple Pod, which it replaced. Straight 5" meaty purple pods turn bright green after two minutes of blanching. Grows well even in cold conditions. Light brown seed. Resistant to CBMV, NY 15, PM. A=2oz, 80¢, ~175 seeds, B=^{1}/2lb, $2.50, C=1lb, $4.00, D=5lb, $14.00, E=10lb, $22.00, K=25lb, $50.00, L=50lb, $90.00.

230 Jade (56 days) PVP. Introduced in 1996, became an instant best-seller. Nearly toppled Provider as our most popular bean in 1997. A favorite with both market and home gardeners, Jade offers great yields of tasty, 5-7" straight slender round dark green pods. Holding quality is Jade's byword. Pods retain their rich color longer than others, both on the vine and after picking. Jade keeps producing quality pods until late in the season, long after others have quit. Jade's strong upright bush habit holds pods above the ground, reducing curling and tip rot. Pods are tender, yet maintain that traditional bean flavor. White seed. Resistant to CBMV, NY 15, CTV, tolerant to rust. *Caution: Jade is a fussier germinator than Royal Burgundy, Provider or Golden Rocky. Be sure your soil temperature is at least 60° and irrigate during dry spells.* A=2oz, 80¢,~190 seeds, B=^{1}/2lb, $2.50, C=1lb, $4.00, D=5lb, $16.00, E=10lb, $28.00, K=25lb, $65.00, L=50lb, $120.00.

238 Bush Blue Lake 274 (57 days) Long considered to set the taste standard for home garden bush bean varieties. Pods avg. 6", fill slowly with tender, plump beans. Very high yields of yummy green beans. White seed. Resistant to CBMV, NY 15. A=2oz, 80¢, B=^{1}/2lb, $2.50, C=1lb, $4.00, D=5lb, $14.00, E=10lb, $22.00, K=25lb, $50.00, L=50lb, $90.00.

246 Roma II (59 days) True flat bush Romano bean offers heavy yields of fleshy medium-green 5" pods which are slow to develop seeds. White seed. Resistant to CBMV, NY15. A=2oz, 80¢, ~200 seeds, B=^{1}/2lb, $2.50, C=1lb, $4.00, D=5lb, $16.00, E=10lb, $28.00, K=25lb, $65.00, L=50lb, $120.00.

BUSH WAX BEANS

262 Golden Rocky (54 days) Also known as Beurre de Rocquencourt, an heirloom from France. The best-tasting wax bean. Germinates well in cool, wet conditions and retains vigor even under cool night temperatures. Noteworthy for slender juicy pods that melt in your mouth. Not beany. Pods grow to 6". Black seed. A=2oz, 80¢, ~245 seeds, B=^{1}/2lb, $2.50, C=1lb, $4.00, D=5lb, $14.00, E=10lb, $22.00, K=25lb, $50.00, L=50lb, $90.00.

271 Buttercrisp (57 days) Sweeter and more tender than Golden Butterwax, which it replaced. 5^1/2" rounded slender bright yellow pods fatten slowly. Market growers will like its good yields and clean, attractive appearance. Home gardeners will enjoy its distinctive flavor. Resistant to CTV, rust and CBMV. A=2oz, 80¢, ~245 seeds, B=^{1}/2lb, $2.50, C=1lb, $4.00, D=5lb, $14.00, E=10lb, $22.00, K=25lb, $50.00, L=50lb, $90.00.

277 Dragon Langerie (57 days) Also known as Dragon's Tongue, this heirloom from the Netherlands is as tasty as it is attractive. Its compact stocky bushes bear abundant creamy yellow beans mottled with purple tiger stripes. A prolific producer of flat 6" pods that are crisp, stringless and amazingly juicy. Dragon is way too good to be dismissed as a novelty. Seed purplish brown with blue stripes. A=2oz, 80¢, ~120 seeds, B=^{1}/2lb, $2.50, C=1lb, $4.00, D=5lb, $14.00, E=10lb, $22.00, K=25lb, $50.00, L=50lb, $90.00.

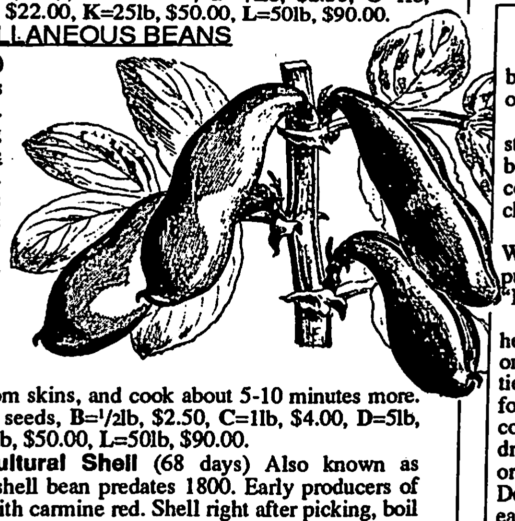
POLE BEANS

2 oz. packet sows 20 poles, 6 per pole. We've used tipis for staking for years. Will Bonsall suggests letting them climb sunflower stalks (give the sunflowers a 2-week head start). See also **#406-415.**

286 Kentucky Wonder (68 days) Also known as Old Homestead. This standard climbing variety, a favorite since the mid-1800s, was given its present name by the eminent Marblehead, Ma, seedsman James J.H. Gregory in 1877. Offered by Olds Seed Co. in their 1915 catalog for 10¢ a packet and 20¢ a pound. The nutty flavor makes them outstanding for freezing. Pick regularly to maintain quality & production. Not good when fat. Brown seeds. A=2oz, 80¢, ~125 seeds, B=^{1}/2lb, $2.50, C=1lb, $4.00, D=5lb, $14.00, E=10lb, $22.00, K=25lb, $50.00, L=50lb, $90,00.

292 Rattlesnake (70 days) Unsolicited customer testimonials keep rolling in for this heirloom with purple streakings on the pods said to resemble the markings of a rattlesnake. The latest, from Kate Mason in Addison, NY: "The Rattlesnake pole beans were outstanding last year. Froze beautifully at all stages." To think that not so long ago we discontinued this variety. It has since become one of our most popular beans. Called Preacher Bean in parts of the South, Rattlesnake produces a good harvest of round 6-7" pods. Tan seed with dark stripes. A=2oz, 80¢, ~135 seeds; B=^{1}/2lb, $2.50, C=1lb, $4.00, D=5lb, $14.00, E=10lb, $22.00, K=25lb, $50.00, L=50lb, $90.00.

MISCELLANEOUS BEANS



298 Windsor Fava (75 days) *Vicia faba* Bush type. Favas are also known as broad beans. Heirloom listed by Fearing Burr in Field and Vegetable Gardens of America in 1863. Unlike other beans, favas should be planted as soon as the ground can be worked. They tolerate frost, but do not thrive in hot weather. Sow the large seeds 3-4" apart. Harvest when the light green beans in the 6" glossy pods reach the green shell stage. Parboil one minute, drain and cool, slip from skins, and cook about 5-10 minutes more. Brown seed. A=2oz, 80¢, ~35 seeds, B=^{1}/2lb, $2.50, C=1lb, $4.00, D=5lb, $14.00, E=10lb, $22.00, K=25lb, $50.00, L=50lb, $90.00.

310 Taylor Dwarf Horticultural Shell (68 days) Also known as Speckled Bays, this heirloom shell bean predates 1800. Early producers of cream-colored pods splashed with carmine red. Shell right after picking, boil until tender (30-45 minutes) and mix with olive oil, chopped garlic and parsley for a late summer treat. Buff seed with red stripes. A=2oz, 80¢, ~120 seeds, B=^{1}/2lb, $2.50, C=1lb, $4.00, D=5lb, $14.00, E=10lb, $22.00, K=25lb, $50.00, L=50lb, $90.00.

318 Scarlet Runner (70 days) Climbing beans often grown as ornamentals for their brilliant scarlet blossoms which attract hummingbirds. Need trellises, fences, or poles; will grow to 10-12'. Can be eaten both as snap or shell (95 days) beans. Beautifully mottled purple and black seeds. Heirloom variety grown as early as 1750 by colonists and in 1791 by Thomas Jefferson. A=2oz, 80¢, ~46 seeds, B=^{1}/2lb, $2.50, C=1lb, $4.00, D=5lb, $16.00, E=10lb, $28.00, K=25lb, $65.00, L=50lb, $120.00.

BUSH DRY BEANS

328 Limelight (85 days) Years ago we trialed Limelight for bush green beans (45 days) and they were horrible, stringy and tough. Had we allowed them to get to the shell stage (around 60 days) or to dry, we'd have liked them much better. The compact plants set light green seeds which are similar in shape, color and taste to baby limas, except sweeter, with a buttery texture. They are very early for a dry bean, much easier to grow than limas in our climate. Developed in Alberta, Canada. Light green to white seeds. A=2oz, 80¢, ~102 seeds, B=^{1}/2lb, $2.50, C=1lb, $4.00, D=5lb, $16.00, E=10lb, $28.00, K=25lb, $65.00.

334 Marfax (86 days) Heirloom resembling Swedish Brown Bean, but earlier and higher yielding. Richly flavored brown baking bean very adaptable to our cool climate. Seed produced in Maine. Golden tan seed. A=2oz, 80¢, ~148 seeds, B=^{1}/2lb, $2.50, C=1lb, $4.00, D=5lb, $14.00, E=10lb, $22.00, K=25lb, $50.00, L=50lb, $100.00.

342 Jacob's Cattle (88 days) Popular New England heirloom variety which derives its name from the biblical story of Jacob and the spotted cattle. Its dark red speckles on white background are said to look like the cattle's markings. If harvested earlier the kidney-shaped beans make superb shellies. Seed produced in Maine. A=2oz, 80¢, ~95 seeds, B=^{1}/2lb, $2.50, C=1lb, $4.00, D=5lb, $14.00, E=10lb, $22.00, K=25lb, $50.00, L=50lb, $100.00.

350 Soldier (89 days) Large drought-tolerant white kidney bean with red-brown soldier-like figure on its eye. A New England favorite for generations. Seed grown in Maine. A=2oz, 80¢, B=^{1}/2lb, $2.50, C=1lb, $4.00, D=5lb, $14.00, E=10lb, $22.00, K=25lb, $50.00, L=50lb, $100.00.

358 Monos Negros (90 days) The name means "black monkeys" in Spanish. Trialer Marina Davis brought this small heirloom black bean to our attention. Plant economy and extreme earliness are its primary assets. Plants neither sprawl, twine nor get moldy. Flavor is not quite as rich as Black Turtle, but Monos ripens much earlier. Seed originally collected by Will Bonsall from Salvadoran immigrants in Vassalboro, ME. Seed organically grown by Alison LaCourse. *Seed in short supply.* A=2oz, 80¢, ~194 seeds, B=^{1}/2lb, $2.50, C=1lb, $4.00. *Not available in larger sizes.*

368 Maine Yellow Eye (92 days) A very old variety, with many different strains. One of Maine's most popular dried beans. Plump oval medium-sized beans, cream with yellow eye. Seed grown in Maine. A=2oz, 80¢, ~115 seeds, B=^{1}/2lb, $2.50, C=1lb, $4.00, D=5lb, $14.00, E=10lb, $22.00, K=25lb, $50.00, L=50lb, $100.00.

376 Red Kidney (102 days) Early-maturing variety of light red kidney baking bean developed at Cornell University. Large beans mature at least a week earlier than similar types. Seed grown in Maine. A=2oz, 80¢, B=^{1}/2lb, $2.50, C=1lb, $4.00, D=5lb, $14.00, E=10lb, $22.00, K=25lb, $50.00, L=50lb, $100.00.

384 Black Turtle (104 days) The original Black Turtle, dating back before 1806, was offered by Grant M. Thorburn, one of the first US seedsmen, in 1832. This strain, an improved upright bush version of the heirloom, was more recently developed by Cornell University. Small black beans with rich spicy flavor popular for soup. Seed grown in Maine. A=2oz, 80¢, ~305 seeds, B=^{1}/2lb, $2.50, C=1lb, $4.00, D=5lb, $16.00, E=10lb, $28.00. *Not available in size K, order size E.*

John Withee—the "Bean Man"

When John Withee of Lynnfield, MA, turned over his collection of 1,186 bean varieties in 1981, it was probably the world's largest private collection of old seeds.

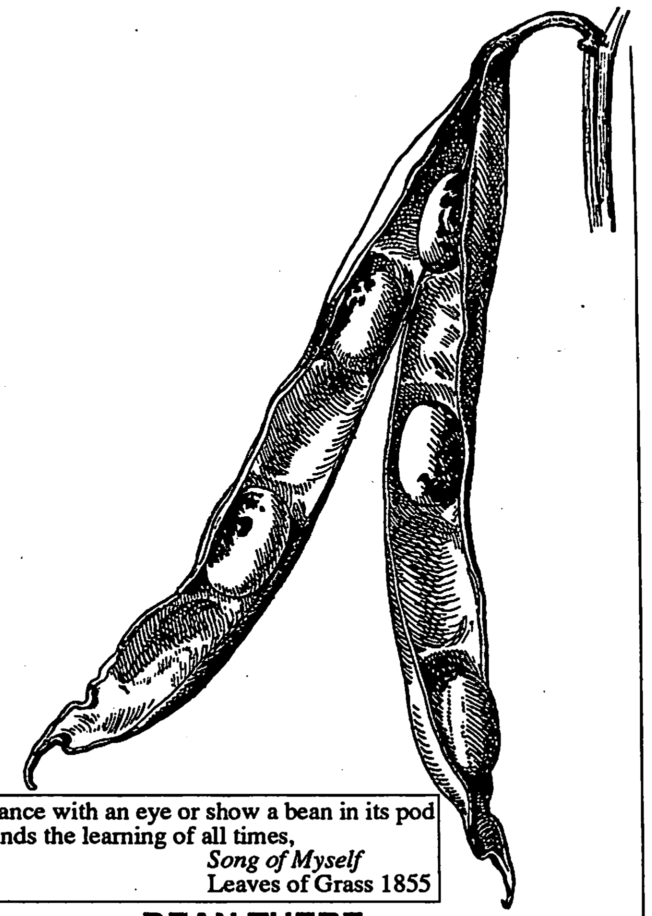
As a boy growing up in Maine, Withee's Friday chore was to dig the hole, start the fire and heat the rocks for his family's traditional Saturday baked bean feast. Forty years later when he decided to revive the tradition, Withee couldn't find the Yellow Eye beans that he fondly remembered from his childhood.

So, whenever he had time off from his job as a medical photographer, Withee returned to Maine, traveling from store to store, talking with people, putting notices in free publications, hunting the beany treasures of his youth. "By swinging a lot, I got a few hits," he said.

After eight years, his collection was so large that he realized he needed help. Beans must be planted at least every four years to remain viable. "It's one thing to plant 200 varieties, but it's another to care for them, take notes, tie them up, and do everything that needs to be done," he explained. So he founded the Wanigan Associates, a non-profit organization named after the cook's raft which the bean-loving Maine loggers brought on their river drives and tied up to a tree on shore overnight. Wanigan members could order beans from the collection if they agreed to return increased seed. Despite Withee's wonderful catalog aphorisms ("Think beans, grow beans, eat beans," "Old beans must never die," "Happiness is a crock of beans," "Be a bean per capita—eat 7 pounds/year."), only 10% of the 400 members lived up to the agreement, many treating Withee as just another seed company. By 1981, overwhelmed by correspondence (which he insisted on answering in longhand) and unsorted beans, Withee turned his collection over to the Seed Savers Exchange and the Rodale Research Farm just in time to save it from total disarray.

Because Withee accepted variety names as given to him, and made no effort to identify duplicates with different names, his collection contained perhaps 900 discrete varieties at the time of the transfer. Many had not been grown out since 1978, or contained samples of a dozen beans or less. While the Rodale Farm in Kutztown, PA, grew out and multiplied the small and older lots, Kent Whealy, facing the herculean task of saving the huge collection with little time left, organized a growers network to multiply the rest. Whealy called it the greatest challenge his organization had ever faced, but his network was equal to the test and within two years had saved better than 90% of Withee's varieties. By 1985, Whealy had returned samples of 600 beans to Withee. Withee put his knowledge of 50 years gardening, collecting and cooking into his book called Growing and Cooking Beans.

Our catalog includes at least a dozen varieties that were in Withee's collection. We undoubtedly owe the continued existence of many of them to the team of Withee, Wanigan and Whealy.



> And to glance with an eye or show a bean in its pod
> confounds the learning of all times,
> *Song of Myself*
> Leaves of Grass 1855

BEAN THERE

BUSH BEANS

402 Benchmark (54 days) Larry Siegel, our Massachusetts bean trialer, and I both selected Benchmark as best in show in his 1998 trial. Benchmark set a new standard for flavor in bush green beans. None of the others came close to matching its tender sweet juicy succulence. Expect heavy early concentrated yields of mostly straight 6" round medium-green pods on medium-large upright plants. The price of the seed matches the quality of the variety. PVP applied for. White seed. Resistant to NY 15 and CBMV. Tolerant to CTV. NEW! A=½oz, $60¢, B=2oz, $1.50, C=½lb, $5.00, D=1lb, $8.00, E=5lb, $20.00, K=10lb, $40.00.

POLE BEANS

406 Northeaster Pole (55 days) Also known as Kwintus. The seed comes from Holland. Earliest and best-tasting pole bean we've tried. Ripens almost two weeks earlier than Kentucky Wonder. Vigorous climbers with outstanding flavor which improves with blanching. Somewhat flattened pods don't get tough even when big. In recent years we've tried several dozen pole beans and have yet to find one that comes close to matching the early quality of Northeaster. Expensive seed worth the extra cost. Northeaster loses vigor after several pickings. Follow with a later variety if you desire pole beans until fall frost. White seed. A=½oz, $1.00, ~28 seeds, B=2oz, $3.00, C=½lb, $10.00, D=1lb, $18.00, E=5lb, $80.00. *Not available in size K, order size E.*

415 Fortex Pole (60 days) The best French pole bean, far superior to Emerité in pod length, tenderness and vigor. Although the medium green pods may be harvested at 6-7" for gourmet filet beans, they retain good quality and sweetness without strings even at 10". Jumbo and asparagus beans, the only longer beans we know, are not nearly as tender. Vines stood up to repeated pickings in our 1998 trial, achieving impressive yields. Expensive seed but worth every penny. Replaces Emerité. Walnut brown seed. NEW! A=½oz, 60¢, B=2oz, $1.50, C=½lb, $6.00. *Not available in larger sizes.*

BUSH HARICOTS VERTS

Haricot vert is French for green bean. This type has fancier quality than American beans and should command a premium in markets. For optimal flavor, pick pods while they are still thin before they develop strings.

432 Maxibel (61 days) Heavy producer of uniform dark green fancy stringless 6-8" pods of exceptional length and ramrod straightness. Voted best-tasting *haricot vert* in our 1995 trial. Pick early and often for highest quality, tenderness and succulent flavor. A gourmet market specialty. Set a Fedco sales record for *haricots verts* as a new item in 1997. Discovered last year by market growers who tripled our order for size E. Speckled brown seed. A=½oz, 60¢, ~95 seeds, B=2oz, $1.50, C=½lb, $5.00, D=1lb, $8.00, E=5lb, $36.00, K=10lb, $65.00.

SOUP, SHELL & DRY BEANS

all bush types except where noted.

444 Vermont Cranberry (70 days) This is the same strain of the heirloom once offered by Vermont Bean Seed. The pods contain 5 to 6 speckled cranberry-colored shell beans. Reliable, hardy and easy to shell. A New England tradition since before 1800. For dry beans, add three weeks to maturity date. Seed grown in Maine. *Caution: viney habit has not been bred out of this cultivar.* A=½oz, 60¢, ~32 seeds, B=2oz, $1.50, C=½lb, $5.00, D=1lb, $8.00, E=5lb, $20.00, K=10lb, $40.00.

448 Cannellini (80 days) Also known as Cannelone, predates 1900. ½" white kidney shell bean. The clear winner of the four varieties in our staff taste test, drawing such comments as "really scrumptious—where's the tortillas?" "creamy delicious," and "my favorite." The mild-tasting beans become tender when cooked, perfect for minestrone and other soups or stews. May also be grown as dry beans; add 20 days to maturity. Good performer in cool weather. A=½oz, 60¢, ~25 seeds, B=2oz, $1.50, C=½lb, $5.00, D=1lb, $8.00, E=5lb, $20.00, K=10lb, $40.00.

452 King of the Early (85 days) Some years back longtime seed-saving customer Linwood Ware sent us a sample of this beautiful mottled red baking bean. King's ability to ripen early, its capacity to swell enormously when soaked, its utter dependability through hot summers and cool, and its hearty flavor make it a real winner. We've found King of the Early easy to grow and heavy yielding year after year. Seed grown in Maine. A=½oz, 60¢, ~25 seeds, B=2oz, $1.50, C=½lb, $5.00, D=1lb, $8.00, E=5lb, $20.00, K=10lb, $40.00.

462 Hutterite (88 days) *Crop failure; unavailable for 1999. We hope to reoffer in 2000.*

470 Calypso (90 days) In 1994 Calypso generated more interest than any other bean introduction in years. And no wonder. Our first glimpse of Calypso at the 1992 Common Ground Fair Exhibition Hall won us over. At once stark and stunning, its markings are uncannily similar to the Chinese yin/yang symbol. This black and white dry bean even includes a contrasting dot. Though not as heavy a yielder as King of the Early, Calypso dependably produces 4-5 beans per pod, with a texture similar to Yellow Eye. For good recipes see Calypso Bean Soup by Lesa Heebner (#6514 in the book section). Seed grown in Maine. A=½oz, 60¢, ~28 seeds, B=2oz, $1.50, C=½lb, $5.00, D=1lb, $8.00, E=5lb, $20.00, K=10lb, $40.00.

476 Agate Pinto (92 days) A bush pinto with medium-sized mottled beans of rich spicy flavor. Rogers Bros. succeeded in breeding out the usual sprawling runners, a breakthrough in Pinto development which makes Agate easy to harvest. Seed grown organically in Maine by staffer Alison LaCourse. A=½oz, 60¢, ~33 seeds, B=2oz, $1.50, C=½lb, $5.00, D=1lb, $8.00, E=5lb, $20.00, K=10lb, $40.00.

478 Bumblebee (95 days) Big fat blocky bean, white with a maroon "bee" with stinger around hilum. Really swells up when soaked, almost like a lima. May be served as shell beans (subtract 20 days from maturity date), add butter or olive oil, salt and pepper. Allowed to dry, make an excellent easy-to-digest baking bean, cooking up with a nice smooth texture and flavor. One of the beans in John Withee's collection; we have traced this heirloom to the Garland, ME, area. A=½oz, 60¢, ~16 seeds, B=2oz, $1.50, C=½lb, $5.00. *Not available in larger sizes.*

479 Red Chili (100 days) May be same variety as Mexican Red. Mahogany red bean black around the eye, oval but flat, looks like a kidney but smaller. Its earthy taste makes an ideal base for chili. Grainy texture makes it unsuitable for baking. Easy to digest. The vining plants yield very well. Gene found the original seeds in a health food store, liked the beans so much he saved the seeds for a growout. Seed organically grown in Maine. A=½oz, 60¢, ~40 seeds, B=2oz, $1.50, C=½lb, $5.00, D=1lb, $8.00, E=5lb, $20.00, K=10lb, $40.00.

480 Packers Lima *Phaseolus lunatus* (100 days) With global warming apparently bringing later fall frosts to our region, limas are becoming a better bet. Packers was the clear winner of the dozen limas we trialed in 1997. Warm weather crops normally don't thrive in Parkman, ME, yet trialer Alison LaCourse harvested mature beans in profusion without having to resort to pre-season finagling. Her branching bush plants were laden with 3" flat pods. Maybe you had those horrible canned ones when you were a kid and are still convinced that you don't like limas? Baby limas fresh from the garden are so sweet and delicious that you won't believe you're eating the same vegetable. Light green-white seed. NEW! A=½oz, 60¢, B=2oz, $1.50, C=½lb, $5.00, D=1lb, $8.00, E=5lb, $20.00, K=10lb, $40.00.

MISCELLANEOUS BEANS

488 Shirofuma Soybean (90 days) *Glycine max* Shirofuma is the best edible green soybean we have ever tasted. Our stock seed came from Tom Vigue, who has done considerable work with this crop. Like Tohya, which it replaces, Shirofuma grows vigorous thigh-high vines with early concentrated sets of delicious light green pods, many with three beans. It is about two days later than Tohya, but ripens by late August, even in our climate. Beans are decidedly tastier than Tohya's. Green soys are an excellent substitute for limas in short-season areas. The Japanese eat them as beer nuts, boiled and salted. A wonderful fresh soyfood. Our seed was grown without pesticides, herbicides or chemical fertilizer Downeast by Scott Howell. NEW! A=½oz, 60¢. *Not available in larger sizes.*

AMAIZING CORN *Zea mays*

2 oz packet sows 50 ft, 1 pound sows 400 ft. CAUTION: Untreated sweet corn seed will not germinate in cold wet soil. Please be patient and wait till soil warms to at least 60° before sowing, or start seedlings indoors and transplant at 3-6" stage before taproots take off. Tender, will not survive frost. Heavy nitrogen requirements. Rows 3' apart, 4 seeds/ft. Thin to 1' apart. When corn is knee-high, a side-dressing of azomite or alfalfa meal can really stimulate growth. Should be planted in blocks of at least 4 rows to ensure adequate pollination, essential for good tip fill.

If you have trouble with crows pulling up seedlings, use Bird-Scaring Balloons (see **#9351**) or cover sowings with floating row covers (**#9121-9134**). Remove covers at 3-6" stage to avoid plant abrasion. A few drops of mineral oil applied to the silks can substantially reduce earworm damage. Although we know of no sure defense against critters, interplanting with pumpkins may improve the odds.

Most of our recent introductions have been homozygous sugary enhanced crosses (five from the superb breeding program at Mesa Maize). Trialers Donna Dyrek (Loon Song Farm) and I (Shooting Star Farm) have found sugary enhanced corn to be especially suitable to our climate, with good cool-soil tolerance and a near-perfect blend of sugars and corn flavor. All SE sweet corn traces back to a single inbred developed in the 1960s in Illinois by Dr. Dusty Rhodes, ILL677a.

Be sure to isolate supersweet corns by at least 25' (100' for large plantings) to avoid tough, starchy kernels.

See also **#6812-6818.**

YELLOW SWEET CORN

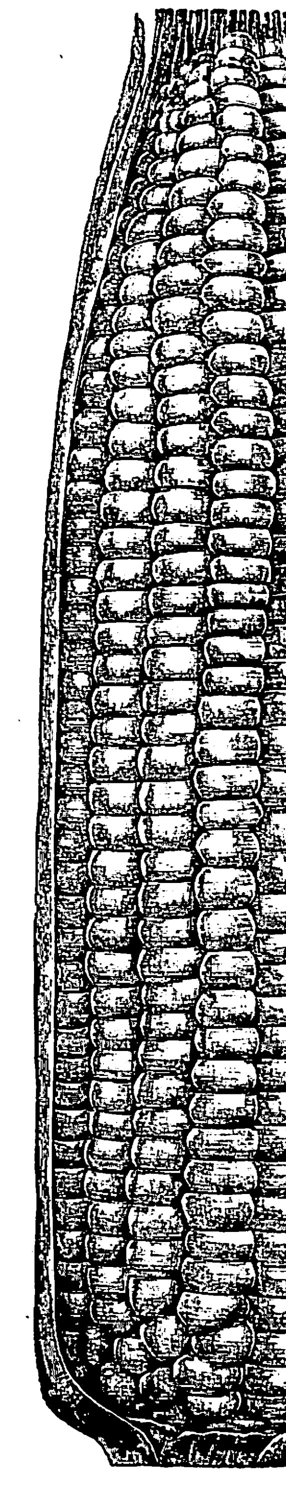
508 Spring Treat (71 days) The choice of early corn connoisseurs, Spring Treat has been our most popular sweet corn since its introduction in 1995. We've tasted a lot of new earlies in recent years, but none have zinged our taste buds like this yellow SE hybrid. Showing good cold soil emergence, Spring Treat ripens around the time of Sugar Buns, but with longer ears that are easier to pick. The real clincher is its rich corny taste that we hadn't enjoyed since Intrepid. Not as sweet as Sugar Buns, but better eating quality, ear length and appearance than any other early corn. A=2oz, $1.20, ~280 seeds, B=½lb, $4.00, C=1lb, $7.00, D=5lb, $30.00, E=10lb, $60.00.

516 Ashworth (72 days) Open-pollinated Ashworth is a composite of early varieties originally developed by the late Fred Ashworth of St. Lawrence Nurseries and marketed by Johnny's Selected Seeds starting in 1978. According to a local legend, Ashworth originally named his variety "Rat Selected" in honor of the rats who broke into his seed storage room and alerted him to certain kernels which they preferred. Its short stalks have 6-7" yellow ears with good flavor. Be sure to harvest it at peak milk stage—like all open-pollinated corn it does not hold quality for long in the field. Germinates well in cool soil. A=2oz, $1.20, ~210 seeds, B=½lb, $4.00, C=1lb, $8.00, D=5lb, $40.00. *Not available in size E, order size D.*

524 Sugar Buns (74 days) Yellow sugary enhanced hybrid from Crookham with melt-in-your-mouth tenderness. About as sweet as our palates like, but not cloying like the supersweets. Sugar Buns does not have as good cold soil emergence as other early corns; please don't rush it. A=2oz, $1.20, ~405 seeds, B=½lb, $4.00, C=1lb, $7.00, D=5lb, $30.00, E=10lb, $60.00.

540 Bodacious (77 day) Crookham's sugary enhanced hybrid has exceptionally sweet corny tender yellow kernels that taste as good as its name! 8" ears have been outstanding in our trials. Resistant to ST. A=2oz, $1.20, ~270 seeds, B=½lb, $4.00, C=1lb, $7.00, D=5lb, $30.00, E=10lb, $55.00.

546 Kandy Plus (78 days) F-1 hybrid. Kandy Plus grows the most attractive ears of corn we've ever seen. Only Silver Queen can come close to matching its perfect appearance. Its 8½" cylindrical ears usually fill all the way to the tips. It doesn't disappoint on flavor, either. "Kandy" says all you need to know about its sweetness. "Plus" is the corny quality it delivers on top of the sweetness. Grow Kandy Plus for a classic midseason yellow homozygous sugary enhanced treat. Resistant to common rust. Tolerant to ST and NCLB. A=2oz, $1.20, ~380 seeds, B=½lb, $4.00, C=1lb, $8.00, D=5lb, $36.00, E=10lb, $70.00.



556 Tuxedo (80 days) F-1 sugary enhanced hybrid. Dress may be an over-rated quality in human society, but when it comes to commercial sweet corn varieties, dress is more than just a pretty face. The well-dressed sweet corn has good husk protection to keep those pesky earworms out! Tuxedo lives up to its name. When other varieties were infested with earworms in 1994, Tuxedo had none, even when we left it on the stalks past peak maturity. Its attributes are not confined to the surface. It offers a rich sweet tender corny taste which is the equal of any midseason yellow, and handsome 8" ears with 16 rows of delicious kernels that will melt in your mouth. Tuxedo can germinate at cool temperatures and withstand a fair amount of stress. I haven't worn one since my high school prom, but I'd want this one for my farmstand! Tolerant to ST, rust and smut. A=2oz, $1.20, ~355 seeds, B=½lb, $4.00, C=1lb, $7.00, D=5lb, $30.00, E=10lb, $55.00.

560 Incredible (85 days) I'm not sure how we overlooked Crookham's superior late-midseason sugary enhanced hybrid Incredible for ten years. But it was a full tassel-length ahead of the competition at the 1996 Loon Song Farm trial, where its handsome 8" tip-filled yellow ears were just scrumptious. Incredible is not just sweet; it really delivers a deep corn taste. Good husk protection and tolerance to rust and ST. A=2oz, $1.20, ~515 seeds, B=½lb, $4.00, C=1lb, $7.00, D=5lb, $30.00, E=10lb, $55.00.

564 Kandy Korn (89 days) Attractive deep purple husks and excellent holding quality make this hybrid yellow corn a real winner at roadside stands. One of the first sugary enhanced varieties, Kandy Korn has stood the test of time, and continues to enjoy well-deserved popularity. Tolerant to ST, common rust. A=2oz, $1.20, ~235 seeds, B=½lb, $4.00, C=1lb, $7.00, D=5lb, $30.00, E=10lb, $55.00.

BICOLOR SWEET CORN

576 Quickie (71 days) Early bicolor hybrid. Ripens with Sugar & Gold, but displays more uniform high quality, longer ears, and 12 rows of kernels instead of 10. We keep looking, but Quickie is still the best early bicolor we've found. A=2oz, $1.20, ~310 seeds, B=½lb, $4.00, C=1lb, $7.00, D=5lb, $30.00, E=10lb, $55.00.

580 Seneca Appaloosa (73 days) F-1 hybrid supersweet. You may have noted our reluctance to jump on the supersweet bandwagon. The early supersweets had a cloying sweetness without much corn flavor, and a devil of a time germinating in our cold soils without fungicide treatment. The breeders of Appaloosa overcame those faults to produce an early bicolor with good cold soil emergence, admirable seedling vigor, decent yields and premium eating quality. Growers will love its refined appearance, too. The 8" ears are filled to the tips with 16 rows of beautiful bicolor kernels packaged in tight dark-green husks. A=2oz, $2.00,~420 seeds, B=½lb, $8.00, C=1lb, $13.00, D=5lb, $60.00. *Not available in size E, order size D.*

584 Double Gem (76 days) A classy bicolor sugary enhanced hybrid for the all-important second-early slot, Double Gem's blocky 8" ears fill well to the tip for a lot of good eating. Rarely have we encountered such sweetness and tenderness in this early a corn. Good cold soil emergence. A=2oz, $1.20, ~355 seeds, B=½lb, $4.00, C=1lb, $7.00, D=5lb, $30.00, E=10lb, $55.00.

602 Lancelot (82 days) We took notice when Loon Song Farm trialers rated this midseason bicolor sugary enhanced hybrid as better than Burgundy Delight in 1995. Lancelot has a lot going for it besides its sweet, tender kernels. It snaps easily, is very drought tolerant, and shows good tip fill. Best-tasting of the 16 varieties in my 1996 trial. A=2oz, $1.20, ~375 seeds, B=½lb, $4.00, C=1lb, $7.00, D=5lb, $30.00, E=10lb, $55.00.

610 Burgundy Delight (84 days) Burgundy Delight represented corn breeding at its best. We regret the grower discontinued production of this classic midseason bicolor. *Sorry, no longer available.*

> A child said, What is the grass? fetching it to me with full hands;
> How could I answer the child? . . . . I do not know what it is any more than he.
> *Song of Myself*
> Leaves of Grass 1855

SWEET CORN SELECTIONS AT A GLANCE

variety	item #	days	color	type*	avg height	ear length	# rows
Spring Treat	508	71	yellow	se-se	72"	7-8"	14
Ashworth	516	72	yellow	op	60"	6-7"	12
Sugar Buns	524	74	yellow	se-se	76"	6-7"	14
Bodacious	540	77	yellow	se-se	87"	8"	18
Kandy Plus	546	78	yellow	se-se	84"	8.5"	16-20
Tuxedo	556	80	yellow	se-se	90"	8-9"	16
Supersweet Jubilee	6818	85	yellow	sh2	96"	8.5-9"	18
Incredible	560	85	yellow	se-se	90"	8"	18
Kandy Korn	564	89	yellow	se	102"	8"	16
Quickie	578	71	bicolor	ns	52"	7"	12
Seneca Appaloosa	580	73	bicolor	sh2	66"	8"	16
Double Gem	584	76	bicolor	se-se	75"	8"	16-18
Kiss 'n Tell	6812	81	bicolor	se-se	76"	7"	16
Lancelot	602	82	bicolor	se-se	84"	7-8"	16-18
Spring Snow	626	73	white	se-se	66"	7-8"	12-16
Luther Hill	636	82	white	op	48"	5"	
Platinum Lady	646	83	white	se	84"	8.5"	14
Silver Queen	658	96	white	ns	102"	8"	14-16

*genetic type
op = open-pollinated
ns = normal sugary
se = heterozygous sugary enhanced
se-se = homozygous sugary enhanced
sh2 = supersweet

Note: Adjacent plantings of corns of different color kernels will result in some cross-pollination. 8-10 rows' distance is sufficient to maintain purity.

WHITE SWEET CORN

626 Spring Snow (73 days) Sugary enhanced hybrid. At last an early white sweet corn with a real corny flavor! No longer will white corn lovers have to wait for Platinum Lady. Now Snow will give you a great start on the season until Lady is ready. Expect 7$^1/_2$" ears of excellent quality for early in the season. Tolerant to ST, resists lodging. A=2oz, $1.20, ~290 seeds, B=$^1/_2$lb, $4.00, C=1lb, $8.00, D=5lb, $36.00, E=10lb, $70.00.

636 Luther Hill (82 days) Open-pollinated. Since spring when *Organic Gardening Magazine* publicized this heirloom, interest has greatly increased. We scoured the States and Canada searching for seed and finally found some grown organically in Oregon. Developed by and named for Luther Hill of Andover Township, NJ, in 1902, and one of the parents of the venerable Silver Queen, Luther Hill was the most popular sweet corn in New Jersey before the hybrids took over. "I remember driving to different farmstands with my father in the '60s in New Jersey looking for it," recalls one customer. If you desire those perfect 8" ears so often depicted in the glossy catalogs, Luther Hill is the wrong choice. But if you want 2-3 surprisingly sweet and cunnin' 5" ears on each modest 4' stalk, Luther will deliver. A great way to get reintroduced to old-timey sweet corn, and you can save your own seed. *Seed in short supply, order early.* A=2oz, $2.00, B=$^1/_2$lb, $8.00. *Not available in larger sizes.*

646 Platinum Lady (83 days) White F-1 hybrid. Yes, we still have seed for Platinum Lady, arguably the most attractive as well as the most tasty of all sweet corns. Since the grower has discontinued production, this may be your last chance to enjoy Lady's perfect balance between corny and sugary, its sparkling sweet tender kernels and its decorative purple leaves. Roast a few ears with some new potatoes, that's good eating! Our thanks to those who wrote Crookham to express their displeasure. Crookham is replacing Lady with a variety called Argent, which they claim is superior. I did not find it so and believe the real reason for their decision, like so many others in the seed trade, can be found in the name of the replacement, which means "money" in French. A=2oz, $1.20, ~255 seeds, B=$^1/_2$lb, $4.00, C=1lb, $7.00, D=5lb, $30.00, E=10lb, $55.00.

658 Silver Queen (96 days) White hybrid which has long set the standard for late-maturing sweet corn. Large handsome ears, with glossy white creamy sweet kernels that fill to the very tips. Although risky in short-season areas, it ripens for us most years a few days before Common Ground Fair in late September, sneaking in just ahead of our first killing frost. I can't think of a better way to end the corn season. *Caution: germinates poorly in cold soil.* Tolerant to NCLB, ST. A=2oz, $1.20, ~255 seeds, B=$^1/_2$lb, $4.00, C=1lb, $7.00, D=5lb, $30.00, E=10lb, $55.00.

POPCORN See also #5940.

663 Japanese Hulless Popcorn (72 days) Use this open-pollinated variety to raise miniature corn for Chinese cuisine. Harvest the fingerlike baby ears around five days after silks appear. They are delicious in hors d'oeuvres and stir-fries and make excellent pickles. Or allow to grow to full size for popcorn which will take 110 days. The 5' plants each bear three to six 4" ears with white kernels. A=2oz, $1.20, ~630 seeds, B=$^1/_2$lb, $4.00, C=1lb, $7.00, D=5lb, $30.00, E=10lb, $55.00.

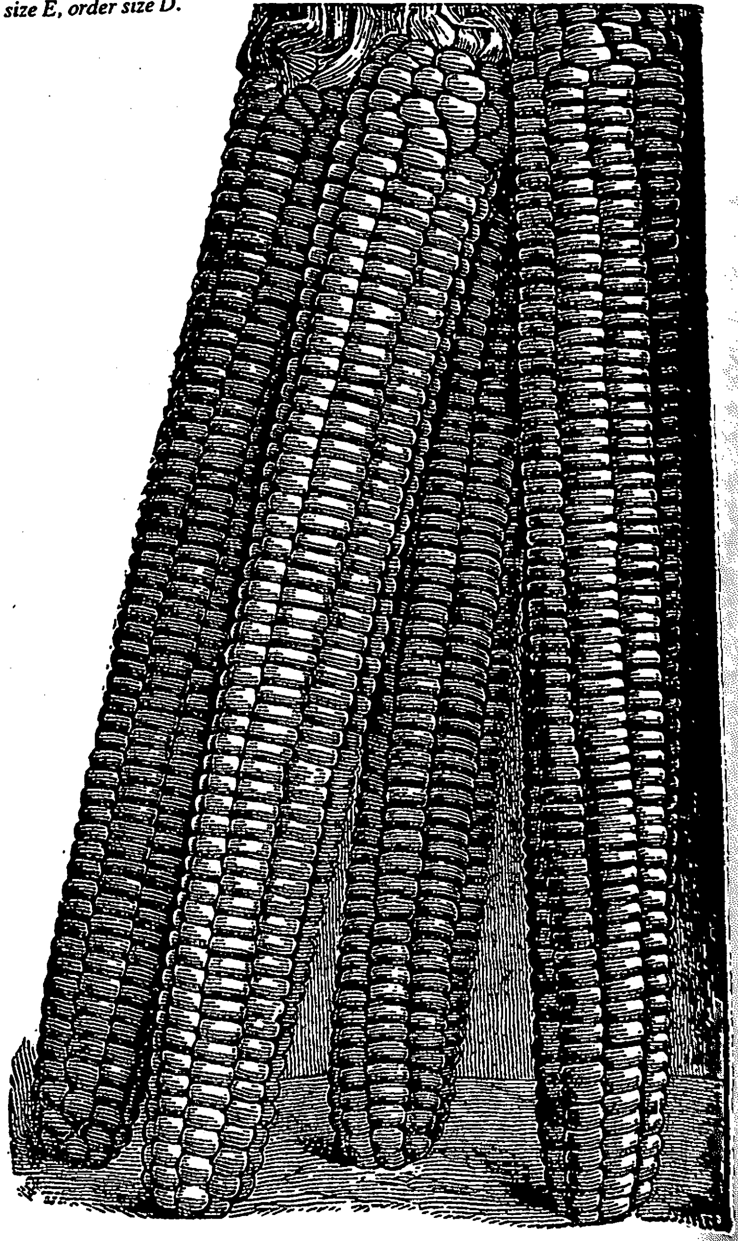
666 Strawberry (95 days) Open-pollinated heirloom. Highly decorative maroon 2" ears which taper slightly to the tip. Colorful kernels pop into a white popcorn. A=2oz, $1.20, ~800 seeds, B=$^1/_2$lb, $4.00, C=1lb, $7.00, D=5lb, $30.00, E=10lb, $55.00.

678 Robust White Popcorn (95 days) F-1 hybrid. Also known as 21-82W. It pops! And doesn't stop. This early white hulless popcorn has the same great eating quality as White Cloud—crisp and tender, light and flaky—but with a better yield of larger kernels on 7" ears. The 6' plants have the stalk strength to survive September storms intact. A=2oz, $1.20, ~580 seeds, B=$^1/_2$lb, $4.00, C=1lb, $7.00, D=5lb, $30.00, E=10lb, $55.00.

DRY FIELD CORN

682 Roy's Calais Flint (85 days) We admire Tom Stearns' work at High Mowing Farm in the cold Northeast Kingdom of Vermont. A young seedsman selling exclusively homegrown organic seed, Stearns collaborated with us on this introduction. As Roy's caught on and became the most popular variety in his catalog, Stearns began getting requests for larger quantities of seed that he felt we might be better equipped to fill. We can't describe this variety any better than he did, so with his permission we've lifted his catalog copy. "This is the most exciting heirloom that I've ever been handed. It has led me on an incredible journey filled with characters the entire route. I eventually ended up in a small valley in Calais, VT, where Roy Fair's friends and family still live. This corn variety was given to Roy by his dad and given to him by his dad which dates it back at least to 1860-1880 in that same cold valley...Please join me in preserving and enjoying this true Vermont heirloom which was recently...close to extinction. Used for Johnny Cakes, cornmeal or in any other dish, this variety has both golden yellow and dark maroon ears. Incredibly early and able to grow well under cold conditions, it has made mature and dry ears in as few as 80 days." In my 1998 growout it was as Tom described, early with ears up to 8-9", most golden yellow. Seed organically grown in the Kingdom by Jack Lazor. NEW! A=2oz, $1.20, B=$^1/_2$lb, $4.00, C=1lb, $7.00, D=5lb, $30.00, E=10lb, $55.00.

688 Mandan Bride (98 days) A colorful flour corn believed to have originated with the Mandan tribe of Minnesota and North Dakota. I love stringing the many-hued ears on a line to complete the drying process and celebrate the beauty and bounty of the harvest. Seed grown in Maine without pesticides, herbicides or chemical fertilizers. A=2oz, $1.20, ~225 seeds, B=$^1/_2$lb, $4.00, C=1lb, $7.00, D=5lb, $30.00. *Not available in size E, order size D.*



PEAS *Pisum sativum*

2 oz packet sows 30 ft, 1 lb. sows 240 ft. Primitive forms of pea seed have been found dating back to the Swiss Lake dwellers, perhaps 5,000 years ago. Street vendors in ancient Athens served hot pea soup to passers-by, ancient Romans attending the theatre ate fried peas in lieu of popcorn. Young plants very hardy but frost stops production at the blossom or pod stage. Like cool, moist weather; dislike heat. Sow as early as ground can be worked for best yields. All peas produce more when staked; varieties over 2$^1/_2$' must be supported. Plant 8-10 seeds/ft. in rows 3' apart (5' if very tall varieties). Early morning picking retards spread of powdery mildew disease and ensures best flavor. If you love peas as much as we do, you may want to try for a fall crop. Timing is crucial, as peas ripen slowly in the cool of September, and frost will halt production. We recommend 1st week July planting for fall crop in central Maine. Warmer areas try mid-July. Novartis controls most of the world's pea seed production. Recently, we have not been happy with their selection criteria. Most of the new AFILA (Lacy Lady type foliage) and heavily dwarfed varieties they are emphasizing don't deliver enough flavor to be worth growing. We are seeking a serious Western grower for several superior older varieties that are no longer commercially available to help renew the popularity of this deserving vegetable. All peas are open-pollinated.

SHELL PEAS

710 Coral (53 days) PVP. Makes harvesting peas before July 4th a cinch, even in cold pockets. The best quality early pea we've yet found, and an instant best-seller in 1994. This year unusually delightful April weather enabled us to start sowing peas on April 12. By June 22 Coral was producing copiously and by July 1 had delivered most of its respectable yield. Short vines barely surpass 2' and tend to set earliest pods low. 6.66 peas per pod in 1998. Resists F1, PLR. A=2oz, 80¢, ~235 seeds, B=$^1/_2$lb, $2.50, C=1lb, $4.00, D=5lb, $14.00, E=10lb, $22.00, K=25lb, $45.00, L=50lb, $85.00.

720 Maestro (55 days) Early Green Arrow-type resistant to powdery mildew. Once our most popular pea, now trails Green Arrow and Coral. Extremely heavy yielders under favorable conditions. Set record in our '82 trials with almost 50 pounds per 100 row ft. Easy to pick because long pods fill out only as peas ripen. 3' vines. 8.28 peas per pod in our 1995 trial. Not as sweet as Early Frosty or Lincoln; quality deteriorates quickly after picking. Not a good shipper. Tolerant to PEMV, PM, YBM, W. A=2oz, 80¢, ~185 seeds, B=$^1/_2$lb, $2.50, C=1lb, $4.00, D=5lb, $14.00, E=10lb, $22.00, K=25lb, $45.00, L=50lb, $85.00.

724 Knight (56 days)
Although it has never been a good performer in our trials, we are offering Knight at the request of several market growers who depend on it for early yields and mildew resistance. Short 2' vines bear large peas in long pods of the Progress type which ship well. Niche variety not recommended for home gardeners. Resistant to W, PM; tolerant to PEMV. NEW! *Available in large sizes only, D, E and K.* D=5lb, $14.00, E=10lb, $22.00, K=25lb, $45.00, L=50lb, $85.00.

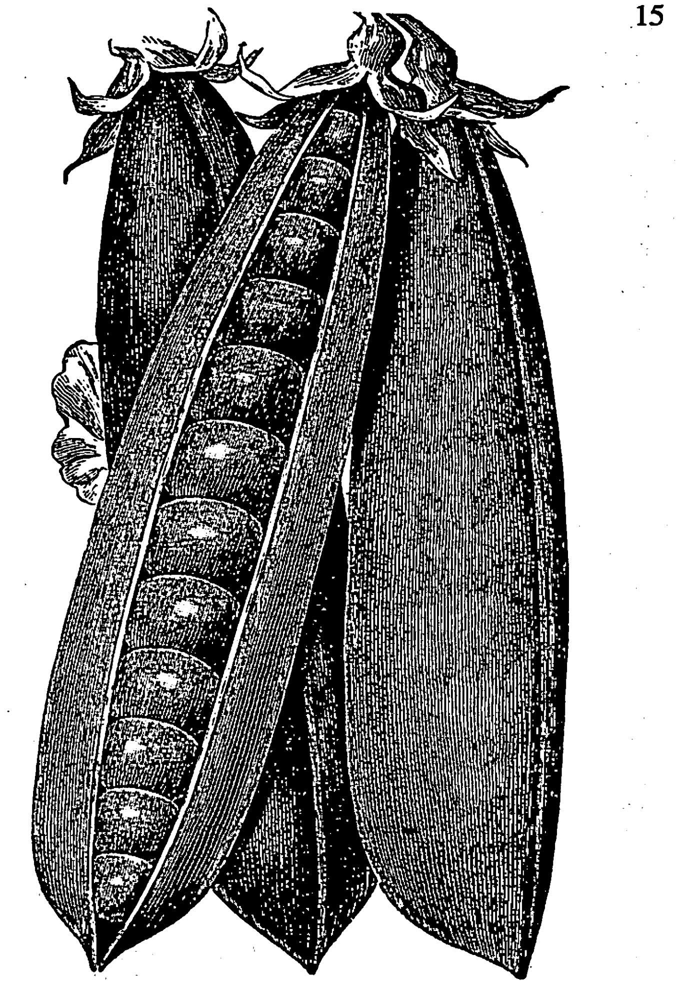
732 Early Frosty (60 days)
Outstanding quality and sweetness, excellent for freezing. Tricky to pick because it is best before the pods are completely filled, but one of the easiest to shell. Holds quality for a long time after picking. Vines grow up to 3'. Susceptible to powdery mildew; performs best in early sowings. A dependable yielder every year, Frosty was a spectacular performer during 1992's exceptional pea season, producing more than 42 pounds per 100 row feet. 6.64 peas per pod in 1998. Resistant to W. A=2oz, 80¢, B=$^1/_2$lb, $2.50, C=1lb, $4.00, D=5lb, $14.00, E=10lb, $22.00, K=25lb, $45.00, L=50lb, $85.00.

740 Patriot (62 days) Crop failure. *Still unavailable.* Along with Mayfair and Miragreen, one of the varieties for which we are seeking a grower.

748 Little Marvel (63 days) Old-timey home garden favorite bears tightly packed nearly round pods on 18" vines. Very sweet. Surprising yields for such a dwarf plant. Introduced to the US in 1908. A=2oz, 80¢, ~250 seeds, B=$^1/_2$lb, $2.50, C=1lb, $4.00, D=5lb, $14.00, E=10lb, $22.00, K=25lb, $45.00, L=50lb, $85.00.

754 Top Pod (64 days) PVP. Has heat resistance to match Wando's with higher yields. Bore at Shooting Star Farm throughout the warm August of 1993. PM resistant. 2$^1/_2$' tall, with good flavor for a summer pea. A=2oz, 80¢, ~210 seeds, B=$^1/_2$lb, $2.50, C=1lb, $4.00, D=5lb, $14.00, E=10lb, $22.00, K=25lb, $45.00, L=50lb, $85.00.

760 Green Arrow (65 days) Sets the standard for mid-season varieties. Long pods with up to 10 peas per pod on vines up to 3'. Very heavy yielding, was especially vigorous in 1997's good pea season. Easy to pick because pods tend to set in pairs at the top. Our most popular pea, sold around 900 lbs. of seed in each of the last three years. Tolerant to F, DM, CTV, W. A=2oz, 80¢, ~270 seeds, B=$^1/_2$lb, $2.50, C=1lb, $4.00, D=5lb, $14.00, E=10lb, $22.00, K=25lb, $45.00, L=50lb, $85.00.



772 Miragreen (68 days) *We regret Miragreen is no longer in commercial production. Not available in 1999.* We are multiplying seed stocks in hope of offering again in 2001.

780 Lincoln (70 days) Apparently originated in England and first offered in America by J. M. Thorburn in 1908, the year before the first Lincoln penny. I join many in rating this old favorite the sweetest pea and the best still in commercial production. I never fail to plant at least one row per season for the best garden grazing. Vines up to 3' bear 3-3$^1/_2$" slender curved pods in mid-season. Consistently 6-8 peas per pod; 6.66 average in 1998. Susceptible to powdery mildew. Tolerant to W. A=2oz, 80¢, ~210 seeds, B=$^1/_2$lb, $2.50, C=1lb, $4.00, D=5lb, $14.00, E=10lb, $22.00, K=25lb, $45.00, L=50lb, $85.00.

788 Mayfair (72 days) Alas, no longer in commerce, although for combination of taste and yield, perhaps the best pea variety ever developed. Is there a Western pea grower who'd like to take this on? *Not available this season.*

792 Alderman or **Tall Telephone** (75 days) Another old-time favorite, and one of the best-tasting, introduced by noted pea breeder Thomas Laxton around 1891 and first sold by Burpee in 1901. Alderman and Tall Telephone are considered synonymous today, although U.P. Hedrick makes a distinction between the two in his 1928 classic Peas of New York. He says both derived from Telegraph, a variety originated in 1877. Alderman boasts vines of 5-6' or more under very fertile conditions. Needs strong staking and frequent picking. Pods avgd. almost 5" with 8.3 peas per pod, best of the 11 varieties in our 1989 trial. Resistant to W. A=2oz, 80¢, B=$^1/_2$lb, $2.50, C=1lb, $4.00, D=5lb, $14.00, E=10lb, $22.00, K=25lb, $45.00, L=50lb, $85.00

SOUP PEAS

796 Holland Capucijners (85 days) We welcome the return of these delicious brown-grey soup beans. Their name derives from the markings on the peas said to look like the cowls of Capuchin friars, and is pronounced cap-you-*say*-ner. Even if you don't want the peas, the plants are worth growing as ornamentals for their violet, red and pink flowers and their spectacular purple pods. 6' vines must be staked. If we run out of Holland, we will substitute Blue Pod, a virtually indistinguishable variety. *Seed in short supply; order early.* **BACK!** A=2oz, 80¢. *Not available in larger sizes.*

INOCULANT

798 Legume Inoculant for peas and beans, size B treats 8#, size C treats 60#. Back on our seed order sheet by popular demand. Can also be ordered from the Supplies section (**#8501-2**). Other inoculants are available only in the Supplies section (**#8504-9**). B=$2.50, C=$4.00.

EDIBLE PODDED PEAS

Culture same as shell peas. Snow peas should be harvested before pods fill out. Snap peas taste sweetest when completely filled. A common mistake is to pick snaps too soon. Young snap plants may be harvested for greens, good in mesclun or lightly cooked.

SNOW PEAS

808 Dwarf Grey Sugar (59 days) If you're looking for a snow pea with purple flowers, this old standby dating all the way back before 1773 is the best we know. Burpee sold it for 15¢ per packet and 70¢ per pound in 1955. "Dwarf" refers not to its vines which grow 30" but to its elegant thin 2 1/2-3" pods which should be harvested often for classic appearance and great stir-fries. Resistant to F1. A=2oz, 80¢, ~300 seeds, B=1/2lb, $2.50, C=1lb, $4.00, D=5lb, $16.00, E=10lb, $25.00, K=25lb, $55.00, L=50lb, $105.00.

812 Dwarf White Sugar (59 days) Although some strains go back to the 1800s, ours is the 1941 Agway introduction. 3' vines produce abundant early yields at top of plants. Easy to pick. Pods small (2-2 1/2") sweet and tender. Susceptible to yellows. A=2oz, 80¢, ~270 seeds, B=1/2lb, $2.50, C=1lb, $4.00, D=5lb, $16.00, E=10lb, $25.00, K=25lb, $60.00, L=50lb, $105.00.

818 Oregon Giant (60 days) A giant selection from a giant breeder, Oregon Giant is distinguished for its rich green fat wide 4-5" pods, which are good for stir fries, steaming and eating out of hand. Staffer Susan Kiralis rated them by far the sweetest variety, both raw and steamed, of the ten we grew in 1996. Will retain sweetness so they may be picked a little plumper than the thin-podded varieties. We recommend staking the intermediate 3-4' vines. Another breeding coup by Dr. James Baggett at Oregon State University, introduced 1991. In its first year on our list, we sold nearly 700 pounds, more than for any other snow pea since we were obliged to drop Blizzard in 1993. Resistant to PEMV, PM and F1. A=2oz, 80¢, ~170 seeds, B=1/2lb, $2.50, C=1lb, $4.00, D=5lb, $16.00, E=10lb, $25.00, K=25lb, $55.00, L=50lb, $105.00.

819 Blizzard (61 days) The best dwarf snow pea, unfortunately not available because Novartis has discontinued production. Blizzard is a patented variety for which we cannot legally grow commercial seed crops until the year 2005. Blizzard is a perfect example of why the Plant Variety Protection Act is not in the best interests of gardeners and farmers. *Not available this season.*

826 Oregon Sugar Pod II (62 days) Short-vined snow pea from Oregon State University. Pods 4" long, vines 2-2 1/2'. Difficult to pick because fruit tends to set within foliage. Tolerant to PM, resistant to W, tolerant to PEMV. Good choice in sandy soils or under dry conditions. A=2oz, 80¢, ~210 seeds, B=1/2lb, $2.50, C=1lb, $4.00, D=5lb, $16.00, E=10lb, $25.00, K=25lb, $55.00, L=50lb, $105.00.

842 Mammoth Melting Sugar (72 days) The standard climbing snow pea. Vines grow 5-7'. Very heavy yields of 4-5" pods. Continues to produce if kept picked provided powdery mildew does not strike. Very sweet eaten raw as well as sautéed. Heirloom predates 1906. A=2oz, 80¢, B=1/2lb, $2.50, C=1lb, $4.00, D=5lb, $16.00, E=10lb, $25.00, K=25lb, $55.00, L=50lb, $105.00.

846 Osaya Endo (72 days) We are still looking for a reliable seed crop grower. *Not available this season.*

SNAP PEAS

860 Sugar Ann (58 days) PVP. 1983 Silver All-America winner from Sugarsnap breeders Gallatin Valley. Dwarf 2' vines. The earliest snap pea, ripening June 19 this year. Very good quality, sweetest of the dwarf snap peas. Not as heavy yielding as tall Sugarsnap. Use to start the season. Resistant to W. A=2oz, 80¢, ~235 seeds, B=1/2lb, $2.50, C=1lb, $4.00, D=5lb, $16.00, E=10lb, $25.00, K=25lb, $60.00, L=50lb, $110.00.

884 Sugar Lode (65 days) Rogers Bros. invited us to name their release. Our choice stems from the tremendous yields of these bushy 3' plants in our trial. We harvested 34 pounds in concentrated sets from only 52' of row. Although the pods are slow to sweeten, they develop a good pea flavor which becomes sugary when they are full. Recommended for second early crop after Sugar Ann and for late crop after Sugarsnap because they hold well in heat. Rogers has discontinued seed production; we've purchased all their remaining stock, and still have a 2-year supply. A=2oz, 80¢, ~215 seeds, B=1/2lb, $2.50, C=1lb, $4.00, D=5lb, $16.00, E=10lb, $25.00, K=25lb, $60.00, L=50lb, $110.00.

892 Sugarsnap (68 days) This breeding coup by Calvin Lamborn was voted the #1 all-time AAS. One of the very best raw treats in the garden, far tastier than the dwarf varieties, although more work to grow. Tall Sugarsnap vines grow 5-7' and need strong stakes. Pods reach superb sweetness only when completely filled. Then they are incomparable. *Caution: We found the new Super Sugarsnap in our trial to be more susceptible to pea wilt. Insist on the original Sugarsnap.* Resistant to W, very susceptible to powdery mildew. A=2oz, 80¢, ~225 seeds, B=1/2lb, $2.50, C=1lb, $4.00, D=5lb, $16.00, E=10lb, $25.00, K=25lb, $60.00, L=50lb, $110.00.

HONORING PLANT BREEDERS—SEQUEL

In last year's catalog we honored eminent plant breeders as the creative geniuses of our work. Material on the late Dr. Gerald A. Marx arrived after we went to press, so we are including his profile in this catalog.

Dr. Gerald A. Marx

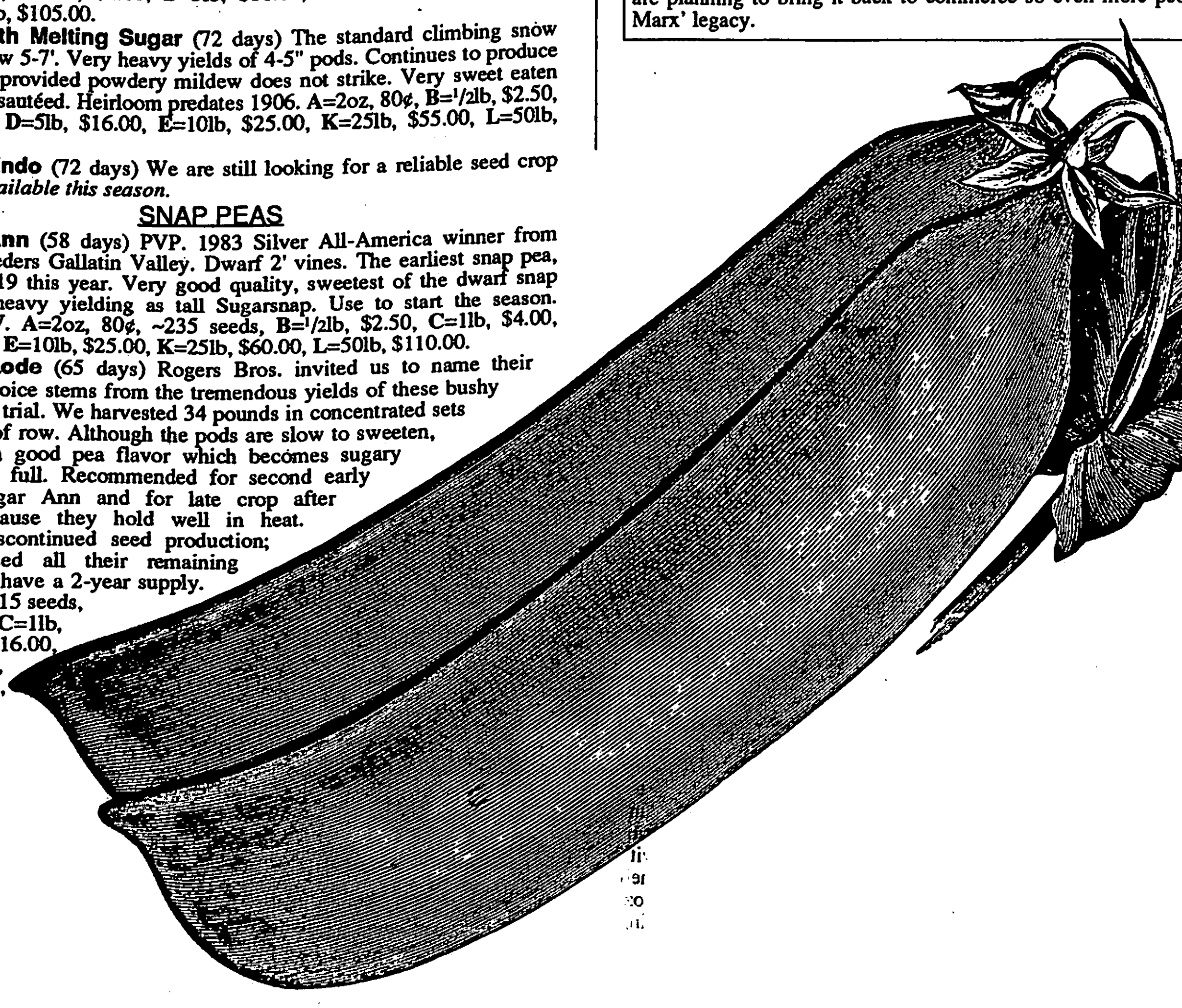
When you say the name "Marx" most people think of the author of *Das Kapital* or of the madcap brothers of stage and screen. To seedspeople the name conjures a very different image—of the man who assembled the greatest collection of pea germplasm in the world, Dr. Gerald A. Marx (1930-1988).

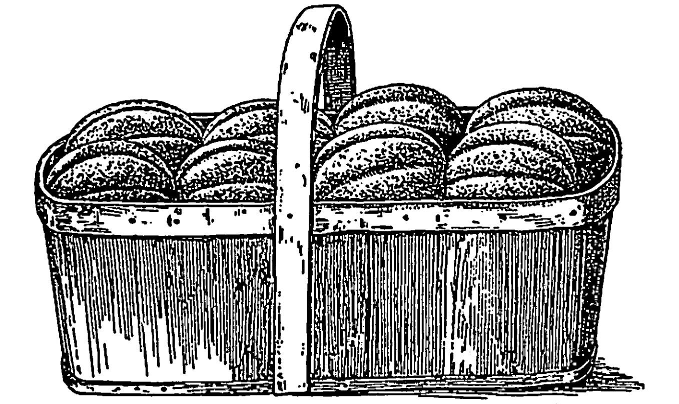
Marx, a professor of Horticultural Sciences at Cornell University for 29 years, also bred tomatoes, beets, carrots and winter squash at the New York State Agricultural Experiment Station at Geneva. But his passion was peas.

A researcher, teacher and worldwide expert on the role of genes in developmental morphology, Marx also was a founder of the Pisum Genetics Association and edited its newsletter for 20 years.

Working with the major pea growers and processing companies, university and USDA scientists, and seed companies, he incorporated new and potentially valuable genes and linkages into breeding lines. He increased the number of peas per pod, incorporated multiple disease resistance to mildew and viruses, reduced the amount of foliage on plants, and encouraged double and triple podding.

Although his career was cut short by illness, his breeding work was prolific. During a dazzlingly successful period in the early and mid-80s he released Olympia, Mayfair, Maestro and Knight shell peas and Early Snap pea. Olympia, Maestro and Knight are widespread in the trade. Since its introduction in 1982, we have sold more than six tons of seed for **#720 Maestro**. We are offering **#724 Knight** to commercial growers for the first time in this catalog. Mayfair, perhaps the best of his varieties, has been unavailable in seed catalogs since Agway dropped it in the early 90s. But we are planning to bring it back to commerce so even more people can enjoy Marx' legacy.





You Can Vine-Ripen Melons In Maine: Here's How

Our extensive trials enable us to offer a superb selection of short-season varieties. Melons are a tender crop with high nitrogen requirements. They love heat, cannot stand frost, and can be damaged by night temperatures below 40°. They require some extra fussing, but oh! are the results ever worthwhile!

- Note days to maturity and select varieties that will ripen in your climate. Sweetie #6, Earliqueen and Yellow Doll are surest bets.
- Start indoors around May 1 in peat pots, 2 or 3 seeds to a pot. Melons resent transplanting but will take if their roots are not disturbed.
- Prepare hills in advance with liberal amounts of well-rotted manure or compost. Don't place melons next to vigorous crawling plants like cucumbers and winter squash. Pollen from adjacent cucumber flowers can cause melons to be bitter.
- Transplant at the onset of a heat wave after all danger of frost is past. Water heavily and, if soil is dry, place a temporary hay mulch around plants until a soaking rain comes.
- Except during droughts, use floating row covers over plants, but to avoid abrasion do not allow covers to touch plants.
- Use black or clear plastic mulch between plants.
- Use a foliar feeding program to speed ripening.
- Remove row covers before buds open. Replace them when you don't desire any more fruit to set.
- To reduce rot loss, rotate ripening melons occasionally. To reduce mouse damage, place ripening melons on bricks.
- Inspect your patch *daily* at ripening time. Check fruits for aroma and color and *pull gently* on those that appear to be ripe. They are ripe if the pressure causes them to slip from the vine. Charentais melons should be harvested just before they slip when they exhibit color change and exude aroma. For watermelons, thumping should produce a low, hollow sound. Spread thumb and forefinger and press hard on fruit. If you feel any give, watermelon is ripe.
- Enjoy an incomparable taste treat!

Since 1996 Jill and Peter de Bethune's superb melon trials have found us ten delectable new selections.

OPEN-POLLINATED MELONS

Cantaloupe, muskmelon etc. 1 oz=about 960 seeds. Watermelon 1 oz=about 670 seeds. Days to maturity are from date of transplanting.

MUSKMELON *Cucumis melo*

908 Jenny Lind (76 days) Johanna Maria Lind (1820-1887), better known as beloved soprano Jenny Lind, was billed as the Swedish Nightingale. She toured America with P.T. Barnum from 1850-1852 thrilling audiences with her glorious bravura singing. This heirloom melon, contemporaneous with her early career, was named for her, and remained very popular in the New York, New Jersey, and Philadelphia area until after her death. A pound of seed in 1918 cost 70¢ from Thomas Griswold & Co. in S. Wethersfield, CT. Jenny has recently enjoyed renewed popularity all over the country. Despite her sparse spindly vines, Jenny is a prolific bearer of small, heavily netted 1 lb. fruits which may be unique among melons for having a turban on their blossom end. Her soft juicy lime green interior flesh is so sweet that it just might make you sing. A=1/16oz, 80¢, B=1/4oz, $1.50, C=1/2oz, $2.50.

914 Green Nutmeg (80 days) These aromatic heavily netted gems weigh 2-3 lbs. apiece with deliciously sweet spicy lime green flesh. Not too imposing on the outside, but a good surprise inside! If subjected to very hot weather, Green Nutmeg may develop a bitter cucumber-like taste. Heirloom dates back to the 1830s. Berne, IN seedsman C.P. Hirschy sold it for a nickel a packet in 1890. A=1/16oz, 80¢, ~75 seeds, B=1/4oz, $1.50, C=1/2oz, $2.50.

926 Golden Gopher (85 days) *Regret crop failure caused by drought in Canada. We hope to have back in 2000. No seed available.*

940 Delicious 51 (88 days) Returned to our list in 1996 after a 14-year hiatus. Some consider Delicious 51 to be the best open-pollinated muskmelon for cold climates still commercially available. One trialer at the first annual Alna melon tasting celebration compared its flavor to that of fine sorbet. Sweet 3 lb. fruits with medium to sparse netting over distinct ribs turn yellow at maturity, may be soft when ripe. Dark orange interiors with sweet juicy aromatic flesh. Developed by Dr. Henry Munger of Cornell University in 1953. A=1/16oz, 80¢, ~43 seeds, B=1/4oz, $1.50, C=1/2oz, $2.50, D=1lb, $12.50, not on long grid order form, see p. 6 for ordering instructions.

WATERMELON *Citrullus lanatus*

962 Sugar Baby (80 days) The standard northern icebox watermelon grows 8-10 lb. fruits, dark green on outside and deep red on inside. Flesh quality grainier than comparable hybrids. A=1/16oz, 80¢, ~45 seeds, B=1/4oz, $1.50, C=1/2oz, $2.00, D=1lb, 12.00, not on long grid order form, see p. 6 for ordering instructions.

968 Cream of Saskatchewan (80 days) After years of trying, we finally have a full crop of this unusual heirloom, and the seed was organically grown in the unlikeliest of places—the cold clime of St. Albans, ME where Jill and Peter de Bethune ripened more than 70 fruits, a feat way beyond the achievement of our previous growers in Virginia and Oregon! John Navazio, now plant breeder for Chriseeds in Washington, has said that "of all the cool climate melons I've grown in Oregon, Maine and Wisconsin, this takes the cake, not just sweet but real character and flavor." Ever since Navazio gave me my first taste around ten years ago, I've been wanting to offer these sweet, juicy melons with cream-colored flesh and abundant seeds. Round 6-10 lb. light green fruits with dark stripes are prone to split because the rind is thin and brittle. BACK! A=1/16oz, $2.00, B=1/4oz, $7.00, C=1/2oz, $12.00.

980 Quetzali (85 days) PVP applied for. The best open-pollinated red watermelon I've ever tasted, sweet (12% sugars) with some substance. So good I was shocked when I found out it is not a hybrid! 9-12 lb. fruits with dark-green rind splotched with lime-green sponge prints. Even more attractive on the inside where the dense pink flesh is almost uninterrupted by seeds! The closest we offer to a seedless melon. This find came from, of all people, Novartis. I didn't know they were even working with open-pollinated melons any more, but I'd love to see more developments from them like Quetzali. *Caution: Requires a sharp knife, strong wrist and sure stroke to cut open its dense rind.* Resists ANTH1. A=1/16oz, 80¢, ~40 seeds, B=1/4oz, $1.50, C=1/2oz, $2.50.

984 Sunsweet (85 days) Our search for an open-pollinated large oval watermelon that can ripen in most parts of the North reached fruition with Sunsweet. We found Sunsweet's deep red flesh to be very sweet, juicy and refreshing. Rind dark green with broken light green stripes. Fruits blocky and big, up to 18 lb. Resistant to ANTH and F. PVP applied for. **NEW!** A=1/16oz, 80¢, B=1/4oz, $1.50, C=1/2oz, $2.50.

992 Moon and Stars (100 days) Once feared extinct, this now-famous unique watermelon became a *cause célèbre* for the Seed Savers Exchange. Released by Peter Henderson & Co. as Sun, Moon and Stars in 1926, it was popular in the '30s (in 1931 Great Northern Seed Co. extolled it for its delicious flesh as well as its distinct appearance), before fading into obscurity for almost fifty years. Kent Whealy found it again in 1981 after a four-year search and his son Aaron supplied us with our original seed stock. Because it needs a lot of heat to set fruit, it poses a challenge worthy of the Maine melon-grower's mettle. Capable of ripening sizable melons in a good season such as 1991 when we raised an 18 1/2 pounder, it normally produces smaller fruits in our cold climate. Dark green rind has beautiful yellow spots which range in size from little peas (the stars) to a silver dollar or larger (the moon). Spotted foliage looks diseased to the uninitiated. Very sweet pink flesh is somewhat grainy. A=1/16oz, 80¢, ~20 seeds, B=1/4oz, $1.50, C=1/2oz, $2.50.

HYBRID MELONS

CHARENTAIS *Cucumis melo*

1014 French Orange (80 days) Replaced Pancha, and like Pancha, a cross between a French Charentais melon and a sweet American cantaloupe. The first full-sized melon with Charentais parentage that usually vine-ripens in our short season without rotting. Ready to harvest when the lightly netted 2-3 lb. fruits develop a yellow-cream blush and become aromatic. They will slip when given a tug. How good is their tangy deep orange flesh? I mistook one for a Golden Gopher in a blind taste test. That's about as strong a compliment as I could bestow on any melon! A=1g, $1.50, ~33 seeds, B=3g, $4.00, C=15g, $18.00.

CANTALOUPES & MUSKMELONS *C. m.*

Cantaloupes are named for the papal gardens of Cantalupo, Italy, where some historians say the first cantaloupe was grown. They are smooth-skinned or lightly netted with few ridges. Muskmelons are usually heavily netted and deeply ribbed with larger seed cavities than cantaloupes. One cup of diced cantaloupe contains 3 milligrams of beta-carotene, which the body can convert to more than the recommended daily allowance of vitamin A, and 68 milligrams of vitamin C, more than the RDA. Cantaloupes develop highest sugar content when daytime temperatures exceed 80° and night temperatures are 60-75°. See also **#6820**

1020 Sweetie #6 Cantaloupe (75 days) Our melon trialers Jill and Peter de Bethune call this "the easiest melon in the world to grow and more productive than any other, even Chaca." They should know. Jill looks forward to copious yields of small oval 1-2 lb. fruits that are so good that it's "like eating butterscotch candy." Indeed, Sweetie is called the Butterscotch Melon because it ripens to a swirl of orange and green flesh with a complex of rich fruity flavors that hold deep into the smooth greenish white rind. Sweetie is ripe when it slips off the stem. It keeps well; flavor actually improves with storage. All that's needed to enjoy Sweetie is a modicum of gardening skill and enough of a sense of adventure to try a new kind of melon. "Our customers love 'em," says Jill. You will, too. **NEW!** A=1g, $1.50, B=3g, $4.00, C=15g, $20.00.

1024 Earliqueen Muskmelon (77 days) Developed by Dr. Brent Loy at UNH, Earliqueen is a reliable early producer of 2-3 lb. fruits of uniformly good quality. A good melon to start the season, its orange flesh is remarkably sweet for such a precocious ripener. Won raves at a taste test of apprentices at Hidden Valley Farm with such comments as "YUM,YUM, I like this one," "great all around," "best melon," "rich, deep." A=1g, $1.50, ~47 seeds, B=3g, $4.00, C=15g, $14.00.

1030 Passport Cantaloupe (77 days) A delicious green-fleshed cantaloupe developed by Dr. Loy, which ripens more than a week earlier than Rocky Sweet. For maximum sweetness, harvest when skin color has turned yellow. If cool wet weather causes cracking before full ripening, harvest at first yellow blush. Texture is smooth, color ranges from whitish-green near cavity to darker green towards rind, with a subtle delectable—almost tropical—taste. Tolerant to ANTH and GSB. A=1g, $1.50, ~33 seeds, B=3g, $4.00, C=15g, $14.00.

1038 Earligold Cantaloupe (78 days) Much more flavor than Sweet Granite or Alaska. Makes a concentrated set of 2½ lb. netted orange-fleshed fruits of uneven quality. The best ones ripen during warm spells to a rich, musky flavor, but in less ideal ripening conditions some are insipid and watery. Skin will turn buff with a melony aroma when ripe. Inspect patch daily as they ripen; their holding quality is suspect. Tolerant to PM and F. A=1g, $1.50, ~40 seeds, B=3g, $4.00, C=15g, $14.00.

1044 Fastbreak Muskmelon (80 days) "Bring back Fastbreak melon!" said Polly Hutchison from Rhode Island. Our melon trialer also takes me to task for damning Fastbreak with bad basketball jokes and faint praise. She says it ripens much earlier than Pulsar so I haven't even given it a fair shake in maturity ratings. (Our supplier for both, Petoseed, rates it as 14 days earlier which is a stretch). OK, while not yet a clamor, interest is growing in this rough-netted slightly ribbed sweet musky 4 lb. melon with excellent interior color. Good yields and superb eating quality for such an early melon—only Earliqueen can compare. Tolerant to F2 and PM1. A=1g, $1.50, ~29 seeds B=3g, $4.00, C=15g, $20.00.

1046 Athena Muskmelon (80 days) Second-favorite behind French Orange in Peter and Jill de Bethune's taste tests. Ripens slightly ahead of Pulsar with nice orange interior color and good sweetness. Oval-round well-netted lightly ribbed fruits average 2½-4 lb. An excellent shipper, recommended for commercial growers. Tolerant to F0,1,2 and PM1,2. A=1g, $2.00, ~40 seeds, B=3g, $6.00, C=15g, $30.00.

1054 Pulsar Muskmelon (82 days) "My total production (from five hills) was 265 pounds (56 melons) of the most aromatic and delicious muskmelon I've ever tasted—in my seventy-five years. At least a dozen of our friends told me they were absolutely the best ever. The variety—you may have guessed—Pulsar! What a melon!" wrote Alden McCutchan of Kenyon, MN, after his 1996 season. Pulsar's large deeply ribbed fruits consistently average 4-6 lb., reaching as large as 7¾. Orange flesh is slightly grainy, exceptionally sweet and aromatic. Ripens dependably with consistent high quality and a muskiness that makes you go back for more. What a treat! Very early for such a big melon—Alden's first ripened on Aug. 15. Tolerant to PM, F. A=1g, $1.50, ~30 seeds, B=3g, $4.00, C=15g, $18.00.

1082 Burpee Hybrid Muskmelon (88 days) The first full-sized vine-ripened muskmelon I ever ate was a Burpee Hybrid. What a revelation! The musky succulent 3-4 lb. fruits have been the choice of discerning market growers for more than forty years. When Burpee introduced it in 1955 it was the most expensive vegetable packet in their catalog at 75¢ for 40 seeds, roughly equivalent to $4.50 in 1998 dollars. Fruits heavily netted with distinctive ribbing and delectable orange flesh. Ripe at full slip. Tolerant to PM. A=1g, $1.50, ~40 seeds, B=3g, $4.00, C=15g, $18.00.

1090 Ambrosia Cantaloupe (91 days) This sweet juicy salmon-fleshed melon is the choice of discriminating growers in areas where the season is sufficiently long. Round fruits average 4 lb. with thick, almost silky smooth flesh and very small cavities. The taste lives up to its name. Can harvest when fruits begin to blush yellow before full slip, and finish ripening indoors, as fruits tend to crack before full slip in cool conditions. *Caution: Not adaptable in short-season areas.* A=1g, $1.50, ~33 seeds, B=3g, $4.00, C=15g, $18.00.

HONEYDEW *C.m.* (inodorus group)

1096 Earli-Dew Honeydew (88 days) A delicious green-fleshed smooth-skinned melon suitable for cool northern areas. 2½-3 lb. fruits blush yellow when mature. Tolerant to PM and F2. A=1g, $1.50, ~45 seeds, B=3g, $4.00, C=15g, $20.00.

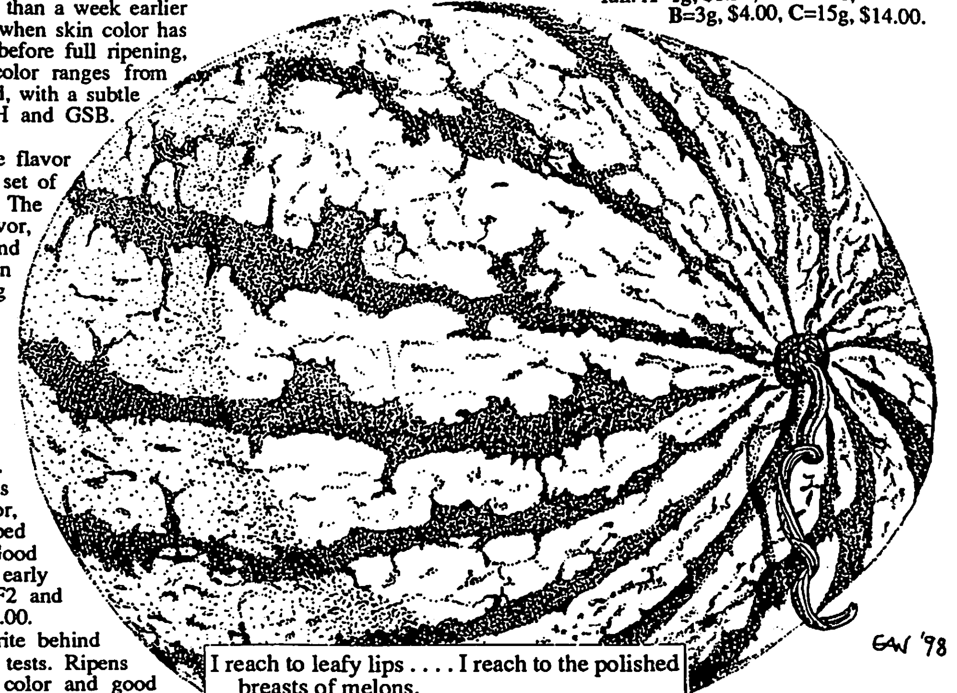
CRENSHAW *C.m.* (inodorus group)

1098 Burpee Early Hybrid Crenshaw (91 days) We were very "meloncholy" when Petoseed dropped its Honeyshaw Crenshaw a few years ago, but here is a suitable replacement. Burpee Crenshaw yields teardrop-shaped 7-10 lb. fruits with firm thick orange indescribably tangy flesh. Flavor is smooth, subtle, refreshing, but not musky. It passed the ultimate melon test by inspiring total passionate abandon among friends of Jill de Bethune who asked her, "What in the world was that melon you gave us?" Rind turns from green to blush yellow as it ripens. *Caution: May not mature in northernmost areas.* A=1g, $1.50, ~30 seeds, B=3g, $4.00, C=15g, $18.00.

WATERMELON *Citrullus lanatus*

U.S. per capita consumption of fresh watermelon has increased 50% since 1980.

1110 Yellow Doll (75 days) Our customers, knowing that the sweet yellow flesh of Yellow Doll cannot be matched by any of the red varieties, have made it our best-selling melon year after year. Doll's 4-7 lb. icebox fruits on a semi-compact vine have a light green rind with dark stripes. Earliness and superb quality make Yellow Doll the best. Vine-ripens even when all others fail. A=1g, $1.50, ~29 seeds, B=3g, $4.00, C=15g, $14.00.



I reach to leafy lips . . . . I reach to the polished breasts of melons.
Song of Myself
Leaves of Grass 1855

1130 Garden Baby (78 days) You want to grow watermelon but you're a little squeezed for space and short on frost-free days? Garden Baby's compact determinate vines and expeditious maturation might just be the answer. Oh yes, there's a slight compromise involved. Garden Baby's 7-8 lb. icebox-sized fruits don't pack quite as much flavor as those 12 lb. Sweet Favorites. But the bright red juicy sweet flesh is good enough to be very enjoyable, each plant gives 2 or 3 fruits in only about half the space of other watermelons, and it won't take a gardening genius to ripen these babies even in Central Maine. Lovely interiors with small seeds. Good, if belated, replacement for You Sweet Thing. **NEW!** A=1g, $1.50, ~29 seeds, B=3g, $4.00, C=15g, $12.00.

1142 New Orchid (80 days) Turn your watermelon feast into a rainbow of colors with apricot-fleshed New Orchid. The perfect complement to Yellow Doll, almost as sweet and tender, almost as early though with slightly less uniform ripening, fruits a little larger (avg. 7-8 lb.) having fewer seeds. Rind is similar to Yellow Doll's, but with darker green stripes. Like eating a bowl of orange sherbet. Another delectable triumph for the world-class Japanese watermelon hybridizers. Expensive, but enough seed so you can enjoy this treat without having to mortgage the farmstead! A=½g, $1.50, ~8 seeds. *Not available in larger sizes.*

1164 Jade Star (85 days) One of our most underappreciated varieties, ripening quickly for such a big melon. Jade Star stole the show in our 1990 watermelon trial, producing round dark green fruit in excess of 10 lbs. Those who tasted the one we brought to our Common Ground Fair booth that fall declared it the most delicious watermelon they'd ever had. Since then we've tried a score of other watermelons without finding any to match Jade's taste. Deep red flesh—similar to that of Sugar Baby but superior in quality—contrasts with its dark rind. Jade is the one red watermelon I would never be without. A=1g, $1.50, ~30 seeds, B=3g, $4.00, C=15g, $12.00.

1176 Sweet Favorite (86 days) 1978 AAS from Sakata. One of the best oblong watermelons for the North. Consistently produces fruits in excess of 10 lb. We grew a 13-pounder in 1987. Flesh sweet, bright red. Green rind with dark stripes. Used as a "control" in our 1998 taste test, it way surpassed the eight other Fedco wannabees. Tolerant to ANTH and F. A=1g, $1.50, ~20 seeds, B=3g, $4.00, C=15g, $12.00.

1188 Sangria (88 days) The sweetest (12-14% sugars), juiciest watermelon in our trials. These elongated ovals average 10-11 lb. with dark green rind broken by light green stripes. Very heavy yielding even in the unfavorable 1996 growing season. Bright refined red flesh will satisfy the most avid sugar seekers. Sangria, the first hybrid Allsweet type ever developed, has been a big hit on the market. Staffer Tom Levesque's big red juicy Sangria met with much acclaim at our Aug. 23, 1997, staff picnic. *Caution: May not ripen in northernmost areas.* Tolerant to some races of ANTH and F. A=1g, $1.50, ~20 seeds, B=3g, $4.00, C=15g, $18.00.

CUCUMBERS

Cucumis sativus

1/16 oz packet sows 11 ft, 1 oz about 180 ft. Very tender, will not survive frost. Sow 2" apart in rows 3' apart or 6 per mound in hills 4' apart thinning to 3 best plants. Combat striped cucumber beetles by handpicking early AM when the dew makes them sluggish, or use floating row covers, removing when cukes flower. Pick frequently for best production. Americans eat an average of 106 pickles a year. See also #6822.

PICKLING

1226 National (52 days) Open-pollinated. Aiming to create a variety adaptable for both small pickles and dills, the National Pickle Packers Assn. initiated a collaborative venture with the Michigan Agricultural Experiment Station in 1924. By 1929, with the introduction of National, which was subsequently distributed by the association, they had a success. Not quite as early as Northern Pickler, but tending to hold quality over a longer season, the firm black-spined dark-green fruits are usually quite sweet, rarely bitter. Plants are vigorous, dependable producers. Resists CMV and scab. A=1/16oz, 50¢, ~65 seeds, B=¼oz, $1.00, C=½oz, $1.50, D=1oz, $3.00, E=4oz, $5.00, K=1lb, $10.00.

1232 Calypso (52 days) Heavy-yielding hybrid of gynoecious type. Fruits medium-dark green with white spines. Tolerant to ANTH, ALS, CMV, DM, PM, resistant to scab. A=1/16oz, 50¢,~55 seeds, B=¼oz, $1.00, C=½oz, $1.50, D=1oz, $3.00, E=4oz, $8.00, K=1lb, $30.00.

1240 Vert de Massy French Cornichon (53 days) A superb open-pollinated variety for gherkin makers. The very spiny fruits should be picked when finger size for delicious tiny pickles. Vines are incredibly high yielding—they just crank out the fruits from July to frost! Fruits are slender, but tend to curve if allowed to grow too large. French heirloom from the 1800s. *Caution: Vert de Massy is too bitter for eating out of hand. It should be reserved for pickling.* A=1/16oz, 50¢, ~60 seeds, B=¼oz, $1.00, C=½oz, $1.50, D=1oz, $3.00, E=4oz, $10.00, K=1lb, $40.00.

SLICING

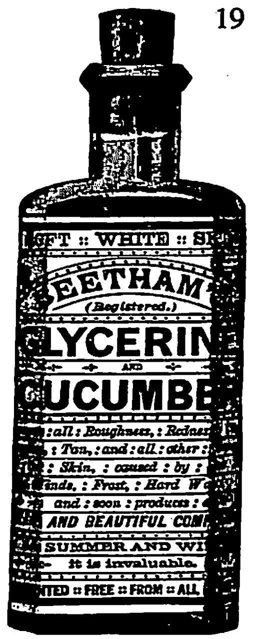
1312 Marketmore 76 (63 days) Open-pollinated. Probably the leading slicing variety in the Northeast. Dark green 8-8½" fruits show good uniformity. Vines vigorous throughout season. Tolerant to CMV, DM, PM, resistant to scab. Developed by Dr. Henry Munger. A=1/16oz, 50¢, ~85 seeds, B=¼oz, $1.00, C=½oz, $1.50, D=1oz, $3.00, E=4oz, $5.00, K=1lb, $16.00

1334 Marketmore 86 (68 days) Open-pollinated. With Hollar having discontinued Spacemaster 80, we offer Marketmore 86 as the closest substitute. It has a small semi-bush vine for ease of picking, although it is not as dwarf as Spacemaster. Broad disease tolerance (CMV, DM, PM and scab) and more vigor make the quality of its 8" fruits superior to Spacemaster's. Not burpless. A=1/16oz, 50¢, ~65 seeds, B=¼oz, $1.00, C=½oz, $1.50, D=1oz, $3.00, E=4oz, $5.00, K=1lb, $16.00.

1356 Shantung Suhyo Cross (60 days) F-1 hybrid. Produces a plethora of uniform 12-14" never-bitter sweet-tasting cukes. Even in dry conditions the vines keep making quality fruits which never develop shrunken necks. Our cucumbers were very gracefully curved, although had we provided trellising they would have been straight. Seed comes from Japan and is very expensive. Tolerant to DM, PM, CMV. A=½g, 50¢, ~20 seeds. *Not available in larger sizes.*

1358 Suhyo Long (61 days) We again have untreated seed for this open-pollinated oriental cucumber which grows up to 15" long with a curly shape. More uniform if trellised. These cukes are sweet with a mild burpless flavor. A=1/16oz, 50¢, B=¼oz, $2.00, C=½oz, $4.00, D=1oz, $8.00, E=4oz, $25.00. *Not available in size K, order size E.*

1360 Boothby's Blonde (63 days) Enchanting heirloom from Livermore, ME, where it was maintained for five generations by the Boothby family. Will Bonsall deserves credit as Boothby's goodwill ambassador, passing it on years ago to Pinetree Seeds and now to us. Fruits feature a creamy exterior with contrasting black spines and a juicy refreshing interior. Seed cavities are larger than those of most other cukes, but the seeds themselves, far from being objectionable, add to the mild sweet flavor that makes the fruits so good for eating out of hand. Boothby's usually lacks the bitter aftertaste that characterizes so many of the other white cukes we've trialed. Fruits are short, plump and oval-shaped, averaging 3-4" and becoming more yellow towards maturity. Has the "cool" texture I've usually found only in the Mideastern types. Seed grown in Maine veganically. *Seed in short supply; order early.* NEW! A=½g, 50¢, *Not available in larger sizes.*

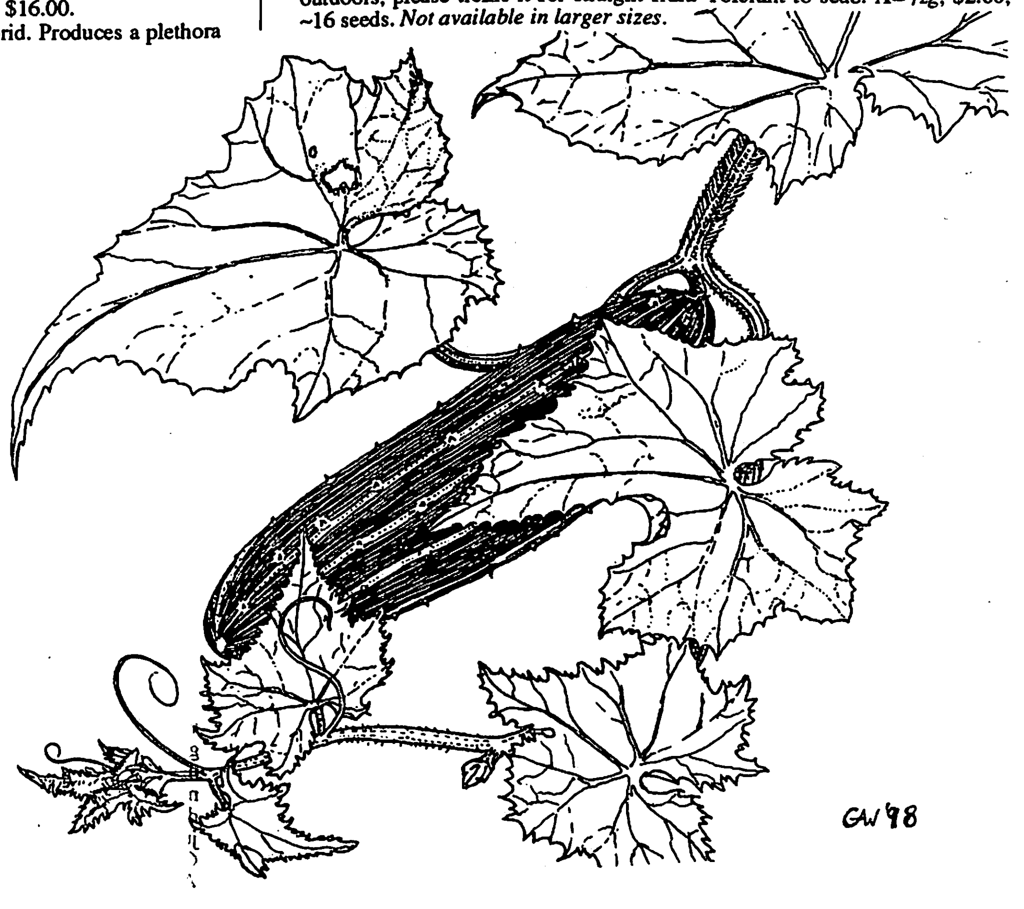


1372 Lemon (68 days) Open-pollinated. Salad chefs and backyard gardeners have rediscovered this specialty variety which dates back to the 1894 catalog of Samuel Wilson of Mechanicsville, PA. Heavy yields of rounded 3" fruits shaped somewhat like lemons. Color evolves from pale greenish yellow (immature) to lemon yellow (best eating stage) to golden yellow (full maturity and seed production). Very crisp and sweet; never get bitter and one of the best for eating right out of the garden. My dog Kai has learned to harvest these and play ball with them. A=1/16oz, 50¢, ~57 seeds, B=¼oz, $1.00, C=½oz, $1.50, D=1oz, $3.00, E=4oz, $5.00, K=1lb, $20.00.

1382 Amira Middle Eastern (52 days) F-1 hybrid. While no other Beit Alpha type can match the refreshing qualities of Hylares (which the grower discontinued), Amira's 4-5" green smooth-skinned fruits are enjoyably mild and almost completely free of the bitterness quite common in American slicers. Dorothy LeGeyt of East Hartland, CT, found them to be real thirst-quenchers. Commercial growers: Note that Amira has heavy early sets, starting soon after Express. Tolerant to CMV, DM, PM. A=1g, 50¢, ~33 seeds. *Not available in larger sizes.*

1392 Telegraph Improved European (60 days) Originally developed for greenhouse production, but suitable for growing outdoors if trellised, this open-pollinated European cucumber has long (10-14") slim smooth-skinned fruits of very delicate mild flavor, never bitter. Unsupported vines will produce curved and misshapen fruit. Telegraph is parthenocarpic, meaning it can set fruit without being pollinated, an advantage in cold, cloudy summers. A=1g, 50¢ ~35 seeds. *Not available in larger sizes.*

1396 Holland (62 days) F-1 hybrid. Last year we took advantage of a special supplier deal to carry this runaway winner of my 1995 trials, the best-tasting cucumber I ever had. Customers responded by buying more than 1,500 packets, turning what we thought was a 3-year supply into half that. Given its popularity, we've decided to replenish our stock at the regular price. Some seed companies sell comparable varieties for 50¢ *per seed;* we're going to find out if you're willing to pay a about a quarter of that for Holland. Bred for greenhouse culture, Holland produces slender smooth-skinned long, long (12-16") elegant crisp sweet bitterfree cukes—the kind you can find individually plastic-wrapped for a buck fifty apiece in your supermarket. If you grow this parthenocarpic cucumber outdoors, please trellis it for straight fruit. Tolerant to scab. A=½g, $2.00, ~16 seeds. *Not available in larger sizes.*

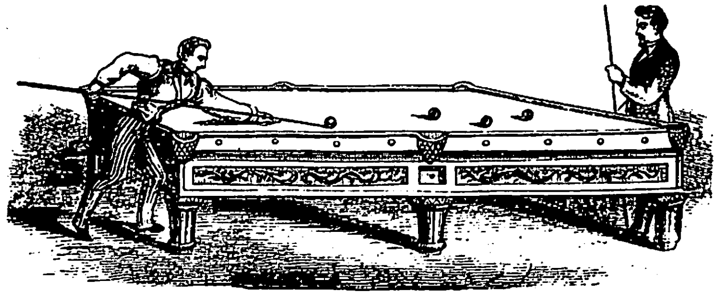


SUMMER SQUASH *Cucurbita pepo*

Packet sows 4-6 hills; 1 oz 40 hills. 200-300 seeds/oz. Tender, will not survive frost. Sow in hills 4 ft. apart, 6 seeds/hill. Thin to 2-3 best plants. Pick squash when they are small for best flavor. Floating row covers can hasten maturity by 1 to 2 weeks. If summer starts off cool, cloudy and sunless, lack of female blossoms can be a problem. The combination of unfavorable weather and a declining bee population results in poor pollination. Some experts claim that in the past decade 90% of wild honeybee colonies and 37% of domesticated colonies have been wiped out by mites, creating a real crisis for cucurbit growers. See also **#6830.**

ZUCCHINI

1402 Eight Ball (40 days) F-1 hybrid. As far as we know, noted squash seed grower Hollar did not have to resort to hiring Minnesota Fats as their publicity director to win an AAS for Eight Ball! Nor are we at all hustling when we inform you that Eight Ball deserved the award. Though we know that round zucchini has been slow to catch on, we think you'll be behind the Eight Ball if you don't give this one a try. Eight Ball has the sweetness and squash flavor that heretofore has been missing from round zucchini. Yes, the attractive shiny speckled dark fruits are mature when they're just a little bigger than pool balls. The plant's open bush habit should please both home and market growers. And with Eight Ball's earliness you might well set a record for the earliest squash you've ever harvested. They'll keep coming, too, till they run your table! Replaces Tatume. **NEW!** A=1/8oz, 80¢, B=1/4oz, $1.50, C=1/2oz, $2.50, D=1oz, $5.00, E=4oz, $20.00, K=1lb, $80.00.



1406 Spineless Beauty (46 days) F-1 hybrid. When I was growing up, to be called "spineless" was one of the ultimate insults. However, when it comes to zucchini, spinelessness is a compliment, and when you harvest Spineless Beauty your hands will never itch. The 7½x1½" medium dark green fruits are borne on open plants with spineless petioles. A standout in Sam Birch's productive summer squash trial. **NEW!** A=1/8oz, 80¢, B=1/4oz, $1.50, C=1/2oz, $2.50, D=1oz, $4.00, E=4oz, $16.00, K=1lb, $60.00.

1408 Seneca (48 days) F-1 hybrid. Early, very prolific slim medium-green fruits. In the last five years we've sold over 8,000 packages (185 pounds) of Seneca. If all the seeds were sown and 90% germinated they would have grown 370,000 plants and possibly six million zucchinis. A=1/8oz, 80¢, ~20 seeds, B=1/4oz, $1.50, C=1/2oz, $2.50, D=1oz, $4.00, E=4oz, $14.00, K=1lb, $50.00.

1418 Seneca Butterblossom (51 days) F-1 hybrid. Bred by Robson Seed Farms to produce a prolific quantity of large, firm male blossoms which hold longer than female flowers and are preferred by chefs as well as Fedco taste testers. By the way, it also produces a fair number of zucchinis. Keep them picked to keep the blossoms coming. A=1/8oz, 80¢, ~20 seeds, B=1/4oz, $1.50, C=1/2oz, $2.50, D=1oz, $4.00, E=4oz, $14.00, K=1lb, $50.00.

1434 Cocozelle (53 days) Open-pollinated Italian-style zucchini with light green stripes, rich flavor. A=1/8oz, 80¢, ~25 seeds, B=1/4oz, $1.50, C=1/2oz, $2.50, D=1oz, $3.00, E=4oz, $4.00, K=1lb, $8.00.

1442 Gold Rush (54 days) F-1 hybrid. Open plant habit and golden color make the cylindrical fruits easy to find. 1980 All-America winner has caught on with home gardeners and market growers. A=1/8oz, 80¢ ~20 seeds, B=1/4oz, $1.50, C=1/2oz, $2.50, D=1oz, $5.00, E=4oz, $18.00, K=1lb, $70.00.

1456 Costata Romanesca (60 days) Open-pollinated. When you've had one zucchini, you've had them all? We thought they all tasted the same until Will Bonsall sent us samples of Costata. Deeply striped and ribbed, Costata resembles Cocozelle, but its flavor is distinctive: sweet and mildly nutty. In the 1995 Seed Savers Yearbook, Bonsall called it "the only summer squash worth bothering with, unless you're just thirsty." Thanks to its exceptionally tender skin, it is quite good until it grows very large, but it also damages easily, a potential liability for any commercial grower who must transport it. Costata is the one to grow for the biggest zucchini at the fair. In 1996 ours weighed 21 lb. and got the blue ribbon. A=1/8oz, 80¢ ~20 seeds, B=1/4oz, $1.50, C=1/2oz, $2.50, D=1oz, $4.00, E=4oz, $14.00, K=1lb, $40.00.

LEBANESE

1488 White Bush (50 days) Open-pollinated. Also called Mid-East or Cousa squashes, Lebanese types are bulbous-shaped light green with white speckles. Robust bushes bear prolifically. Pick fruits when they are young and tender or allow them to fatten for stuffing. Very flavorful. A=1/8oz, 80¢, ~26 seeds, B=1/4oz, $1.50, C=1/2oz, $2.50, D=1oz, $4.00, E=4oz, $8.00, K=1lb, $15.00.

YELLOW

1506 Sundance (47 days) This F-1 hybrid crookneck ripens almost 2 weeks earlier than standard crookneck! And it keeps right on cranking out until frost finally halts it. We have averaged 18 fruits per plant. A=1/8oz, 80¢, ~40 seeds, B=1/4oz, $1.50, C=1/2oz, $2.50, D=1oz, $4.00, E=4oz, $16.00, K=1lb, $60.00.

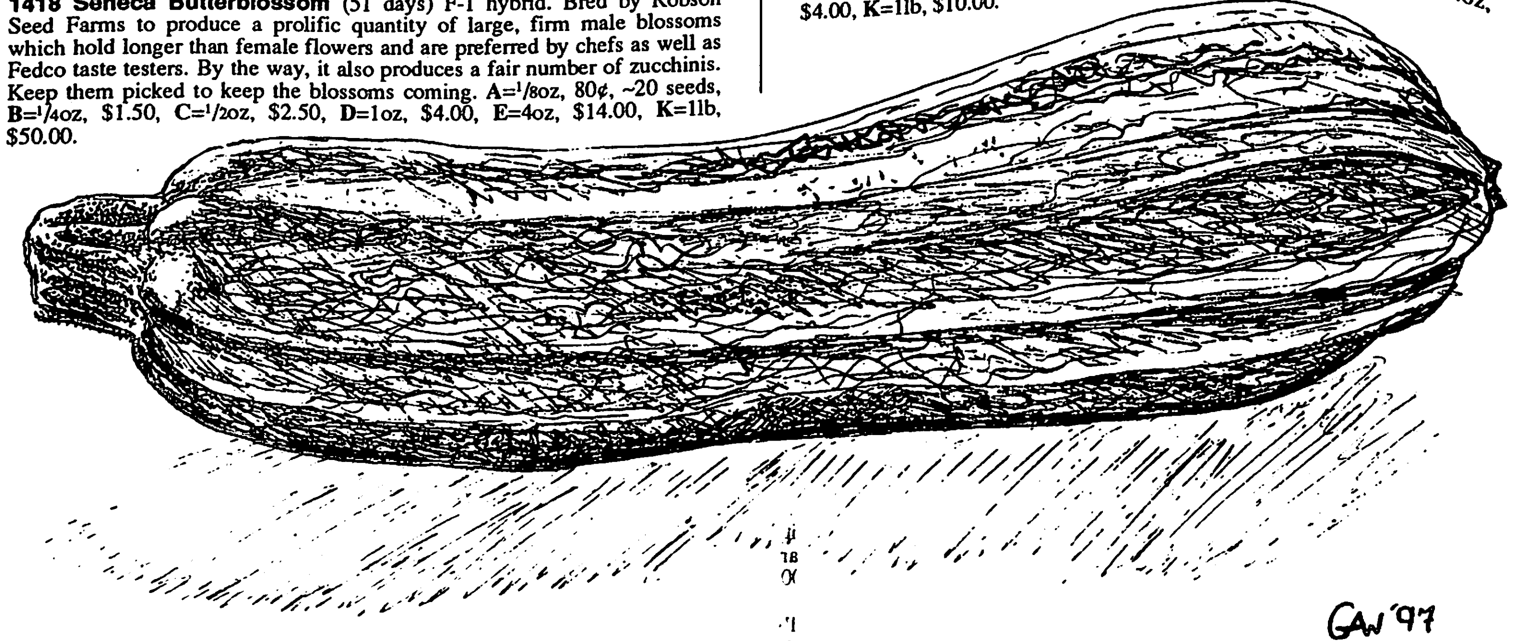
1522 Seneca Prolific (51 days) F-1 hybrid. Heavy-yielding yellow straightneck squash for the North. High yields early. A=1/8oz, 80¢, ~47 seeds, B=1/4oz, $1.50, C=1/2oz, $2.50, D=1oz, $4.00, E=4oz, $14.00, K=1lb, $50.00.

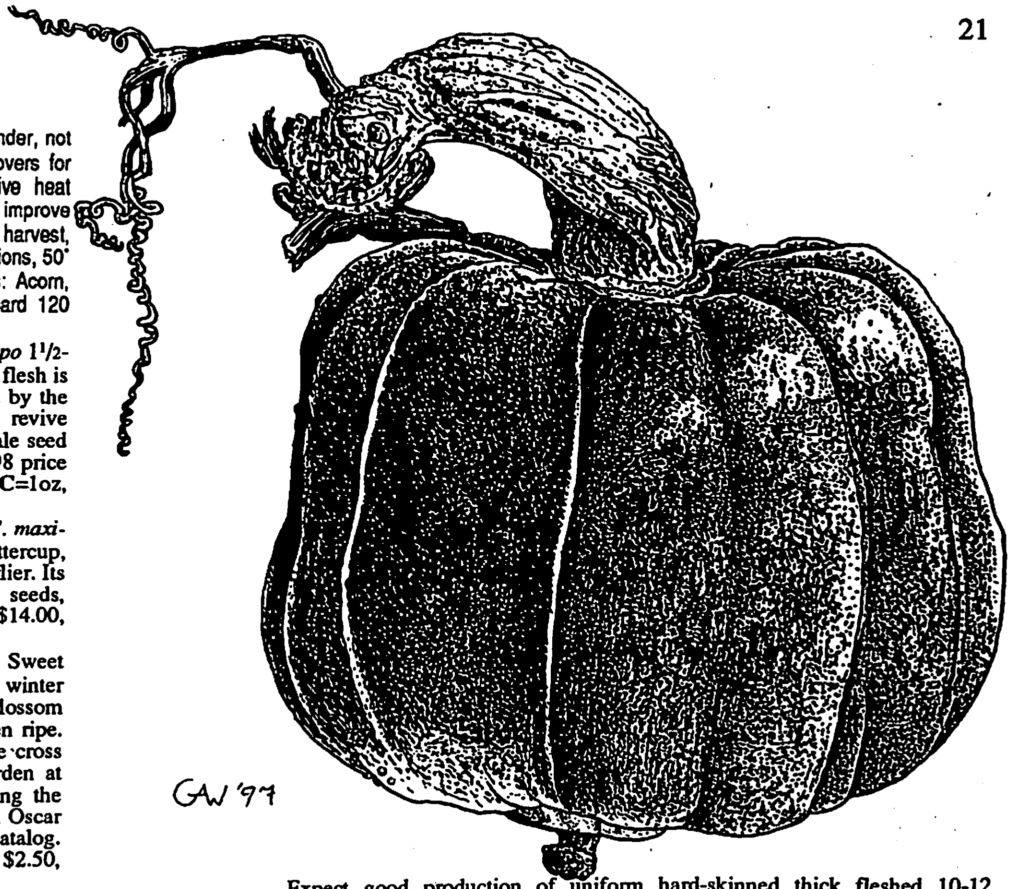
1538 Crookneck (58 days) Open-pollinated. Deep yellow warted fruits with bulbous shape and narrow, curved necks. Best when picked young. Dates back to 1700 and a standard in early 19th century American seed catalogs. Offered by C.P. Hirschy in 1890 for a nickel a packet, 85¢ per pound. A=1/8oz, 80¢, B=1/4oz, $1.50, C=1/2oz, $2.50, D=1oz, $3.00, E=4oz, $4.00, K=1lb, $10.00.

PATTY PAN

1580 Sunburst (52 days) F-1 hybrid. Gourmets call Patty Pans "scallopini," and consider them the most appetizing of the summer squashes. Sunburst is the most attractive of the Patty Pans with its bright yellow skin. 1985 AAS. A=1/8oz, $1.20, ~39 seeds, B=1/4oz, $2.00, C=1/2oz, $4.00, D=1oz, $7.00, E=4oz, $25.00, K=1lb, $100.00.

1590 Benning's Green Tint (55 days) Open-pollinated scalloped pale green counterpart to Sunburst. Fruits are most tender at 2-3" diameter. Susan Pierson of Massachusetts rates Benning's as the best-tasting summer squash, "far surpassing Sunburst and other summer squashes—good texture, too." Market grower Alan LePage also lauds its flavor and considers it an underappreciated variety. Hedrick dates this variety back to 1914. A=1/8oz, 80¢, 75¢, ~34 seeds, B=1/4oz, $1.50, C=1/2oz, $2.50, D=1oz, $3.00, E=4oz, $4.00, K=1lb, $10.00.





Open-pollinated WINTER SQUASH

Plant 4-5 seeds per hill. Allow 4-6 feet between hills. Tender, not frost hardy. Heavy nitrogen feeders. Use floating row covers for earlier ripening and cucumber beetle control. Excessive heat and/or drought can prevent blossom set, reduce yields. To improve flavor and storage, field cure for at least 10 days after harvest, covering if hard frost threatens. Store under proper conditions, 50° and 60-70% relative humidity. Approximate seed counts: Acorn, Butternut 280 seeds/oz, Buttercup 160 seeds/oz, Hubbard 120 seeds/oz, Spaghetti 190 seeds/oz. See also **#1801-1899.**

1608 Table Queen Acorn (90 days) *Cucurbita pepo* 1½-2 lb. black-green ribbed fruits. Good for baking. Dry flesh is best eaten within 3-4 mos. after harvest. Introduced by the Iowa Seed Co. in Des Moines in 1913, helping revive interest in smaller winter squashes. Its 1953 wholesale seed price was 72¢ per pound from Peto-Hollar. The 1998 price is 5.00. A=1/4oz, 80¢, ~73 seeds, B=1/2oz, $1.50, C=1oz, $2.50, D=4oz, $4.00, E=1lb, $14.00, K=5lb, $65.00.

1622 Bush Buttercup Emerald strain (80 days) *C. maxima* Fruits generally a lighter green than Burgess Buttercup, not as uniform or good quality but ready 2 weeks earlier. Its mostly bush habit saves space. A=1/4oz, 80¢, ~35 seeds, B=1/2oz, $1.50, C=1oz, $2.50, D=4oz, $4.00, E=1lb, $14.00, K=5lb, $65.00.

1628 Burgess Buttercup (95 days) *C. m.* Sweet deep-orange flesh makes it New England's favorite winter squash. 4 lb. fruits have acorn-shaped button on the blossom end and flattened shoulders. Stem is well dried when ripe. The original buttercup strain showed up as a chance cross between Quality and Essex Hybrid in the trial garden at North Dakota Agricultural Experiment Station during the 1925 season. After further selection, noted seedsman Oscar H. Will of Bismarck introduced it in his 1931 catalog. A=1/4oz, 80¢, ~31 seeds, B=1/2oz, $1.50, C=1oz, $2.50, D=4oz, $4.00, E=1lb, $14.00, K=5lb, $65.00.

1646 Waltham Butternut (105 days) *C. moschata* Elegant 9" tan fruits weighing 4-5 lb. Orange dry flesh has a sweet nutty flavor. Excellent keeper. 1970 AAS. *Caution: often fails to ripen in northernmost areas.* A=1/4oz, 80¢, ~72 seeds, B=1/2oz, $1.50, C=1oz, $2.50, D=4oz, $4.00, E=1lb, $14.00, K=5lb, $65.00.

1654 Blue Hubbard New England strain (100 days) *C. maxima* Introduced in 1909 by famous seedsman James J. H. Gregory as Symmes Blue Hubbard, in honor of S. S. Symmes, a gardener who worked for his company for many years. Gregory considered it his best introduction, praising its flavor and productivity. In his 1917 catalog he said "close your eyes...and you would think you were eating cake." Bright yellow-orange dry sweet flesh. Each squash will feed a large family because fruits average 15-20 lb., sometimes exceeding 30 lb. Vines crawl all over the garden. Traditional New England favorite. I often stuff one for Thanksgiving. Prized also for its large white sweet seeds delicious roasted. A=1/4oz, 80¢, ~29 seeds, B=1/2oz, $1.50, C=1oz, $2.50, D=4oz, $5.00, E=1lb, $20.00, K=5lb, $90.00.

1660 Sweet Meat (95 days) *C. m.* This tasty 12-15 lb. slate-grey squash developed in Oregon has a loyal following in the West. Its dry sweet nutty thick orange flesh is said to improve in storage. Much more economical than Blue Hubbard with a flavor rivaling the old New England favorite. We hope this excellent keeper will catch on in the East. A=1/4oz, 80¢, ~20 seeds, B=1/2oz, $1.50, C=1oz, $2.50, D=4oz, $4.00, E=1lb, $14.00, K=5lb, $65.00.

1666 Spaghetti (88 days) *C. pepo* A novelty item which caught on and now has devoted followers. Attraction is the spaghetti-like strings in the flesh. Flavor is rather bland. Buff skin turns pale yellow at maturity. Oblong fruits, generally around 4 lb., often are the first winter squashes to ripen in August. A=1/4oz, 80¢, ~46 seeds, B=1/2oz, $1.50, C=1oz, $2.50, D=4oz, $4.00, E=1lb, $14.00, K=5lb, $65.00.

PUMPKINS

Pumpkins are native to N. America and their seeds have been found in Mexico in burial grounds going back 5-7,000 years. All pumpkins are open-pollinated. See also **#1901-1999.**

1674 Baby Pam (99 days) *C. pepo* Agway pie pumpkin has deep orange color and excellent uniformity. Best of all, it vine-ripens 80-90% of its fruits even in a bad year. Fruits average 3-5 lb., slightly smaller and earlier ripening than New England Pie with the same excellent quality. A=1/4oz, 80¢, ~68 seeds, B=1/2oz, $1.50, C=1oz, $2.50, D=4oz, $5.00, E=1lb, $18.00, K=5lb, $80.00.

1682 New England Pie (102 days) *C. p.* The standard small sugar pumpkin, ideal for pies. Has been a favorite since around 1860. Fruits average 5 lb. Most vine-ripen in a good year, about half in a so-so year. A=1/4oz, 80¢, ~70 seeds, B=1/2oz, $1.50, C=1oz, $2.50, D=4oz, $4.00, E=1lb, $12.00, K=5lb, $50.00.

1688 Young's Beauty (105 days) *C. p.* Unimpressed by Autumn Gold's "precocious yellow" gene? Don't care for its tendency to produce irregularly shaped fruit? Prefer a classic mid-sized open-pollinated pumpkin that usually ripens perfect brilliant deep orange globes? Try Young's Beauty. Expect good production of uniform hard-skinned thick fleshed 10-12 pounders which make good pies. Even though Hollar has discontinued seed production, we'd like to keep this beautiful pumpkin in commerce so we have reduced our mark-up so that we can move enough to keep our seed grower interested. *Caution: May not ripen in northernmost areas.* A=1/4oz, 80¢, ~50 seeds, B=1/2oz, $1.50, C=1oz, $2.50, D=4oz, $5.00, E=1lb, $20.00. *Not available in size K, order size E.*

1694 Connecticut Field (115 days) *C. p.* Big pumpkin for Jack O'Lanterns gets 15-25 lb., sometimes more. Heirloom grown by Native Americans and adopted by colonists before 1700. Hirschy sold for 4¢ per packet in 1890. *Ripens for us in good years, but often we must pick green and sun cure.* A=1/4oz, 80¢, ~42 seeds, B=1/2oz, $1.50, C=1oz, $2.50, D=4oz, $4.00, E=1lb, $12.00, K=5lb, $50.00.

1698 Big Max (120 days) *C. maxima* Your kids can have fun growing this giant squash. They may need help moving it, though, because it typically weighs 50-100 lb. and measures up to 70" in circumference! It makes a great Jack O'Lantern. Or, if you don't carve it, you can use it as a temporary chair! A=1/4oz, 80¢, ~24 seeds, B=1/2oz, $1.50, C=1oz, $2.50, D=4oz, $4.00, E=1lb, $14.00, K=5lb, $65.00.

Open-pollinated GAMBOLING GOURDS

We have added to our line of superior gourd varieties, grown in Hungary by Berkop and field-tested in Roberta Bunker's trials at Super Chilly Farm in Palermo, Maine. Gourds come in two major categories (Luffa is a third). The small ones are *Cucurbita pepo* var. *ovifera* (same species as true pumpkins), also known as ornamental gourds for their variety of shapes, colors and surfaces. These vigorous viners will usually mature in our climate if direct-seeded. The larger ones are *Lagenaria siceraria* or hardshell gourds, named from the Greek *lagenos,* a flask, and *sicera*, an intoxicating drink. Lagenaria, though lacking the color range of their smaller cousins, fascinate with their magical shapes. Because of their long season they must be started indoors in our climate. To improve germination sandpaper or clip off the radicle end and soak the seed. They resent transplanting and will grow slowly for a few weeks. Once they take off—wow! These rampant crawlers are noted for their large foliage, more velvety in texture than that of other cucurbits, and their large white almost luminous night-blooming flowers. Unless trellised they will take up huge amounts of garden space. They are heavy feeders. The Nov/Dec 1997 issue of *Organic Gardening* has a good article with tips on growing Lagenaria in short-season areas. Or see The Complete Book of Gourd Craft by Ginger Summit and Jim Widess, **#6518** in our book section. See also **#6832** for Cucuzzi.

1712 Small Ornamental Mix (95 days) *C. pepo* var. *ovifera* 8 kinds of early maturing types, with small spoon, bicolored pear, and small orange most prevalent. A=1/8oz, 80¢, ~72 seeds, B=1/4oz, $1.50, C=1/2oz, $2.50, D=1oz, $4.00, E=4oz, $14.00.

1738 Small Warted Mix (95 days) *C. p.* var. *ovifera* Pear-shaped, scalloped and round warted gourds in a variety of colors and markings, including greens, white-grey combos, and yellow-green combos. Baseball-sized. A=1/8oz, 80¢, ~57 seeds, B=1/4oz, $1.50, C=1/2oz, $2.50, D=1oz, $4.00, E=4oz, $14.00.

1752 Shenot Crown of Thorns (95 days) *C. p.* var. *ovifera* These small gourds have pointed ribs that look like teeth. Sometimes called Ten Commandments because the finger-like projections always number ten. Often called Ghost Gourd because of its white cream color and weird shape. Kids love to paint faces on their smooth surfaces for Halloween decorations. A=1/8oz, 80¢, ~71 seeds, B=1/4oz, $1.50, C=1/2oz, $2.50, D=1oz, $4.00, E=4oz, $14.00.

1754 Colored Crowns Mix (95 days) *C. p.* var. *ovifera* Like Shenot, has the ten pointed "toothed" ribs; unlike Shenot, comes in two green versions. One is green-tinted white, sporting flecked light green stripes between the ribs. The other has dark green stripes along the ribs, particularly at the tooth points, against a flecked light green background. The handsome small fruits weigh almost exactly 1lb. **NEW!** A=1/8oz, 80¢, B=1/4oz, $1.50, C=1/2oz, $2.50, D=1oz, $4.00, E=4oz, $14.00.

1762 Luffa (110 days) *Luffa ægyptiaca* May be more closely related to the cucumber than to the hardshell Lagenaria. Also known as the dishrag gourd, dried and used for making bath sponges. Andrea and Danny Morris of Amherst, MA point out that Luffa is "very tasty and edible when picked young—great when presteamed then...panfried with onions, garlic and curry!" *Caution: Luffa requires a long season. Start indoors and culture like melons*. We recommend trellising if you want your squashes to remain straight. A=1/8oz, 80¢, ~36 seeds, B=1/4oz, $1.50, C=1/2oz, $2.50, D=1oz, $4.00, E=4oz, $14.00.

1764 Chinese Bottle (120 days) *Lagenaria siceraria* These big gleaming green gourds provided the most sublime moment of our 1997 trials. They just took my breath away at first sight with their productivity and graceful beauty. At our display at Common Ground Fair we were inundated with requests for seed. Never mind seed, many people just wanted to take the whole display home! 1' high fruits boast bottom bowl 8-9" in diameter with a stout neck (shorter than the regular bottle gourd) and small upper swelling. Very prolific fruit set; each plant *matures* 8 fruit on average, almost all of consistent good shape. A=1/8oz, 80¢, B=1/4oz, $1.50, C=1/2oz, $2.50, D=1oz, $4.00, E=4oz, $14.00.

Curing *Lagenaria* Gourds is Easy.

Hardshell gourds are 90% water at harvest. They need to be cured or dried, a slow process of evaporation through the outer shell, which is covered by a thin ivory-green skin. Curing can take 6 weeks to 1 year (average time 4 months) depending on gourd size, thickness of shell, weather and storage conditions.

Immature gourds (which have not developed a thick shell) will rot after harvest. Mature gourds are large and weighty. To cure, store off the ground in a well-ventilated room or unheated outbuilding. For a smooth beige surface, scrape off the outer skin after it loosens and darkens. (Freezing and thawing loosens the outer skin.) Outer skin, if left on, may become moldy; mold-patterned skin will dry to the gourd shell and can be sanded off, incorporated into the decoration or painted over.

1766 Large Bottle (120 days) *L. s.* Beware, these vines are rampant crawlers. According to Mass. market grower Eva Sommaripa, this variety makes a better birdhouse than the birdhouse gourd. Eva suggests cutting a hole about the size of a quarter with a paring knife. Take out at least some of the innards. Wrap a wire for hanging around the indented waist, fasten a loop of non-rusting wire or nylon cord around a branch, and the wrens (or other species if you're too far north for wrens) will come. Don't hang gourds too close together, as these birds are territorial. Wrens usually nest twice a season, once in May and once in July, so you have two chances. If you take the gourd inside for the winter, it will probably last a second season. A=1/8oz, 80¢, ~48 seeds, B=1/4oz, $1.50, C=1/2oz, $2.50, D=1oz, $4.00, E=4oz, $14.00.

1768 Speckled Swan (120 days) *L. s.* Stole the show in our booth decoration at the 1998 Common Ground Fair; everybody who saw them wanted one. Beautiful surface is dark green with very pale green 1" splotches which bleed like strokes from a paintbrush. Large round 8-10" base tapers into graceful long neck, sometimes straight, sometimes arched, capped by a small bulb near the stem which looks like a swan's head. If you need a clearer picture, check out the supermarket scene in the movie Pecker which features these gourds. **NEW!** A=1/8oz, 80¢, B=1/4oz, $1.50, C=1/2oz, $2.50, D=1oz, $4.00, E=4oz, $14.00.

1772 Corsican Canteen (125 days) *L. s.* Sets 3-6 fruits per plant, shaped like an old-fashioned canteen with height of 3 1/2" and a 7" diameter, some larger. Will make lovely lidded bowls. Originally from Native Americans in New Mexico. A=1/8oz, 80¢, ~30 seeds, B=1/4oz, $1.50, C=1/2oz, $2.50, D=1oz, $4.00, E=4oz, $14.00.

1778 Siphon (125 days) *L. s.* With their small 5" bulged bottoms and long elegantly curved necks, these looked like swans. The neck curls naturally if not grown on a trellis and can grow to an astounding 5' long. Grow around a broom handle to mould neck into a spiral. A=1/8oz, 80¢, ~ 25 seeds, B=1/4oz, $1.50, C=1/2oz, $2.50, D=1oz, $4.00, E=4oz, $14.00.

1784 Maranka (130 days) *L. s.* Also known as Dinosaur Gourd. Squash grower Hollar calls them "one of the oddest of the Lagenaria." Maranka makes hard-shelled dark green 10-14" long shiny fruits with knobby protrusions or ridges. Graceful neck curves and tapers at the stem end, though will grow straight if supported. *Caution: Requires a longer season than most other Lagenaria, although I have seen beautiful specimens grown in Maine*. A=1/8oz, 80¢, ~25 seeds, B=1/4oz, $1.50, C=1/2oz, $2.50, D=1oz, $4.00, E=4oz, $14.00.

1790 Bushel (135 days) *L. s.* Shaped like a large bowl with a pot lid on it. Can grow enormous given sufficient heat, but in Maine will probably max out at 18" across. *Caution: requires a long season to mature*. To improve your chances limit each vine to one fruit. Prune to halt vine growth after it sets its first fruit. A=1/8oz, 80¢, ~15 seeds, B=1/4oz, $1.50, C=1/2oz, $2.50, D=1oz, $4.00, E=4oz, $14.00.

FANCY WINTER SQUASH

1810 Festival (84 days) *Cucurbita pepo* F-1 hybrid. Festival was the surprise of our October squash tasting feast at North Hell Farm in cold Athens, ME. We knew it was a pretty face, looking as if it were painted to show the beauty of Autumn. But we weren't prepared for the delectable sweetness of the yellow flesh. We took a few bites out of the Acorn, the Cushaw and the Orange Dawn, then passed them on to the dogs, but we ate the Festival right down to the skin. Shaped like Sweet Dumplings, the 1 1/2 lb. yellow fruits streaked with orange have so much eye appeal that they will almost literally walk away from your stand. Better yet, your customers will want more once they've had a taste. Semi-bush vines conserve space. **NEW!** A=1/8oz, 80¢, ~22 seeds, B=1/4oz, $1.50, C=1/2oz, $2.50, D=1oz, $4.00, E=4oz, $14.00, K=1lb, $55.00.

1812 Burpee's Early Acorn Hybrid (84 days) *C. p.* F-1 hybrid. I was very surprised to discover that acorn squash can be this good. Sweeter and drier than other acorns we've tried, Burpee's top-quality fruits get up to 4 lb., yet ripen a week ahead of Table Queen. Saves some space with its large bush habit. A=1/8oz, 80¢, ~35 seeds, B=1/4oz, $1.50, C=1/2oz, $3.00, D=1oz, $5.00, E=4oz, $20.00, K=1lb, $70.00.

1820 Sweet Mama (88 days) *C. maxima* F-1 hybrid. If you like buttercup squash you should try Sweet Mama, a grey-green drum-shaped buttercup type with rounded shoulders and without the cup. Significantly earlier than Burgess with outstanding sweet flavor. My favorite large winter squash, Mama will interest commercial growers as well as home gardeners. 1979 All-America winner. A=1/8oz, $1.20, ~22 seeds, B=1/4oz, $2.00, C=1/2oz, $4.00. 190 seeds/oz. *Not available in larger sizes, order size C.*

1832 Pasta Spaghetti (90 days) *C. pepo* F-1 hybrid. If you find Spaghetti squash bland, you may want to try Pasta. Its rich yellow flesh has a flavor that stands on its own, not just as the underpinning for traditional spaghetti toppings. Dorothy LeGeyt grew them for the first time in 1997 and became a convert. She described Pasta as "great for vegetarians and non-grain pasta fans!" Medium-vined plants set 8" cream-colored 2-2 1/2 lb. fruits which ripen to a light yellow. A=1/8oz, 80¢, ~23 seeds, B=1/4oz, $1.50, C=1/2oz, $2.50, D=1oz, $4.00, E=4oz, $14.00, K=1lb, $55.00.

1842 Delicata (100 days) *C. p.* Open-pollinated. Also known as Sweet Potato squash. Dates back to 1894. After falling out of favor for many decades, it has regained such popularity recently that we now sell more packets than of any other winter squash. Not only are the ivory-colored fruits with dark green stripes lovely, but also the flavor is unsurpassed. Fruits are small, weigh 1-2 lb. and are good keepers. In storage the green stripes turn a delicate orange and the cream background sometimes yellows. We go through a lot of them each season, slicing them and baking them for a sweet treat! We offer a select strain with oval fruits that has proven superior in trials. Its silvery leaves also add a touch of decoration to the squash patch. *This lot of seed contains approximately 10% gourd off-types.* Rogue *out any plants with white flowers*. A=1/8oz, 80¢, ~22 seeds, B=1/4oz, $1.50, C=1/2oz, $2.50, D=1oz, $4.00, E=4oz, $14.00, K=1lb, $40.00. 170 seeds/oz.

1850 Sweet Dumpling (100 days) *C. p.* Open-pollinated. Sometimes we underrate our selections. We always offered Sweet Dumpling because its 1-1 1/2 lb. ivory-colored fruits with green stripes, shaped somewhat like miniature pumpkins, look so stunning that they sell themselves on the stand. A couple years ago Nikos and I taste-tested Dumpling alongside look-alike newcomer Heart of Gold. Heart was good, but Dumpling was better. Although underripe Dumpling fruits taste starchy and insipid, the sweet dry orange flesh of the fully ripe ones is memorably rich. A=1/8oz, 80¢, ~55 seeds, B=1/4oz, $1.50, C=1/2oz, $2.50, D=1oz, $4.00, E=4oz, $14.00, K=1lb, $50.00. 440 seeds/oz.

1866 Baby Blue Hubbard (95 days) *C. maxima* Open-pollinated. A scaled-down version of Blue Hubbard, Baby Blue's vines are much more compact and its fruits much smaller (about 4-5 lbs.) than its counterpart, without sacrificing much quality. A=1/8oz, 80¢, ~40 seeds, B=1/4oz, $1.50, C=1/2oz, $2.50, D=1oz, $4.00, E=4oz, $14.00, K=1lb, $30.00.

1874 Red Kuri (92 days) *C. m.* Open-pollinated. Also called Uchiki Kuri. While all agree the spectacular red-orange fruits are among the most attractive squashes, comments on their flavor have ranged from "the best winter squash" to "glorified zucchini, flavor like water." Liking the dry flesh of this Japanese squash, we think the truth lies somewhere in between. Very popular at roadside stands. Teardrop-shaped fruits avg. 3-4 lb. A=1/8oz, 80¢, ~13 seeds, B=1/4oz, $1.50, C=1/2oz, $2.50, D=1oz, $5.00, E=4oz, $18.00, K=1lb, $70.00.

1878 Honey Delight (95 days) *C. m.* F-1 hybrid. Squash lovers divide into two main camps: supporters of sweet moist flesh and devotees of dry nutty meats. Honey Delight is to dry squash what Buttercup is to moist. Roberta lobbied for inclusion of her favorite dry Japanese Kubocha-type for several years. After more tasters confirmed its superiority over others of the genre, we added it in 1998. Its flesh is as sweet and flavorful as its name implies. Flattened round 5-6 lb. dark green fruits with a silvery mottled overlay are good keepers. A=1/8oz, $1.20, ~20 seeds, B=1/4oz, $2.00, C=1/2oz, $4.00, D=1oz, $8.00, E=4oz, $28.00, K=1lb, $100.00.

1892 Green Hokkaido (98 days) *Crop failure, no seed available. We hope to have back in 2000.*

PUMPKINS

1922 Jack Be Little (95 days) *C. pepo* Tiny ornamental open-pollinated pumpkins weigh only about a half pound. They're great for decorations and a big hit with kids. Also good to eat, said to be excellent stuffed. Flattened, heavily ribbed with vigorous stems. A=1/8oz, 80¢, ~59 seeds, B=1/4oz, $1.50, C=1/2oz, $2.50, D=1oz, $4.00, E=4oz, $16.00.

1936 Autumn Gold (98 days) *C. p.* F-1 hybrid. Even northernmost growers can vine-ripen medium-sized pumpkins with 1987 AAS Autumn Gold. Commercial growers love its "precocious yellow" gene which ensures no green pumpkins at harvest. Instead, immature fruits are yellow, ripening to a deep orange, ribbed, with good handles, 10-15 lb. average. A=1/8oz, 80¢, B=1/4oz, $1.50, C=1/2oz, $2.50, D=1oz, $4.00, E=4oz, $14.00, K=1lb, $55.00.

1952 Lumina (100 days) *C. maxima* Open-pollinated. According to the lead article in the Sept. 23 food section of the Boston Globe, Lumina's "sweet yellow flesh with lustrous ivory skin...has captivated cooks." A "ghostly" white pumpkin that kids will love, Lumina is also excellent for both carving and painting. The fruit are 8-10" high and average 12 lb., though size varies with growing conditions. As long as it is kept away from frost, Lumina stores well, so a face painted on its smooth surface will last for weeks instead of days. Globe correspondent Victoria Riccardi also suggests that Luminas make stunning holders for soups and stews. Under stress, the fruit may develop blue patches. Lumina originated as a chance sport in one of Hollar's California pumpkin fields about eight years ago. PVP. A=1/8oz, 80¢, ~13 seeds, B=1/4oz, $1.50, C=1/2oz, $2.50, D=1oz, $4.00, E=4oz, $14.00, K=1lb, $50.00.

1956 Long Pie (102 days) *C. pepo* Open-pollinated. At its best, our work takes me back to childhood, searching for buried treasure, unearthing artifacts which tell a story comprised of equal parts folklore and verifiable history. Here is a true Maine heirloom, widely grown in Androscoggin County sixty years ago, now almost forgotten, but deserving revival because its full-bodied orange flesh makes the best pumpkin pies we've ever had. Sometime in the late 1980s LeRoy Souther brought the seeds to the Common Ground Fair where cucurbit aficionado John Navazio had a booth. More than 30 years before, a Livermore Falls neighbor, Harry Hurd, had given seeds to Souther. Supposedly, Long Pie originated on the Isle of St. George in the Azores, came to Nantucket on a whaling ship in 1832, and was at first known as the Nantucket Pumpkin as it migrated north to Maine. Long Pie looks like an overgrown zucchini to the uninitiated, but the telltale sign is an orange spot where the otherwise all-green 3-4 lb. elongated fruit rested on the ground. In storage, the whole fruit first blushes, then glows bright orange, signalling that the delicious flesh within is ready to be turned into incomparable pies. We are pleased to be able to complete the circle by returning some seeds to the Southers who have not had them for a few years. Seed grown in Maine without pesticides, herbicides or chemical fertilizers. **NEW!** A=1/8oz, 80¢, ~13 seeds, B=1/4oz, $1.50, C=1/2oz, $2.50, D=1oz, $4.00, E=4oz, $14.00. *Not available in size K, order size E.*

1968 Rouge Vif d'Étampes (105 days) *C. maxima* Open-pollinated. Also known as Cinderella. This spectacular French heirloom turns the pumpkin patch into a glowing blaze with its deeply ridged burnt-orange to red fruits. Pumpkins are flat, quite variable in size, ranging from about 7 lb. to upwards of 30 lb. and make great decorative Jack O'Lanterns. Kids are really intrigued by their color. Strictly speaking, this is a squash, not a pumpkin, and the flesh is not as deep orange or as flavorful as that of the pie pumpkins. Originated in France in the early 1800s and was introduced to the US by Burpee in 1883. A=1/8oz, 80¢, ~13 seeds, B=1/4oz, $1.50, C=1/2oz, $2.50, D=1oz, $4.00, E=4oz, $14.00, K=1lb, $50.00.

Glenn Drowns

Glenn Drowns could be called the Mozart of seed savers. He was gathering seeds from weeds as soon as he could walk. By age 5 he had his own 500 sq. ft. garden. By 8, he had taken over his whole family's garden and started ordering his own seed. By 13 he was saving his own seed, and by 16 growing more than sixty varieties of cucurbits, had figured out on his own how to do crosses and had begun breeding, hoping to find a short-season watermelon that would mature in his unforgiving Northern Idaho climate.

By the time he was 21, his Blacktail Mountain had stabilized. Not only was he successful in breeding a watermelon that was five days earlier than New Hampshire Midget, but he also unintentionally created one with unusual keeping qualities. Three years later, he collaborated with Kent and Aaron Whealy to create the Seed Savers Exchange's first preservation garden, a five-acre grow-out of more than 2,000 varieties (including 370 of Drowns' squashes) that was successful despite the worst drought in Iowa in 75 years.

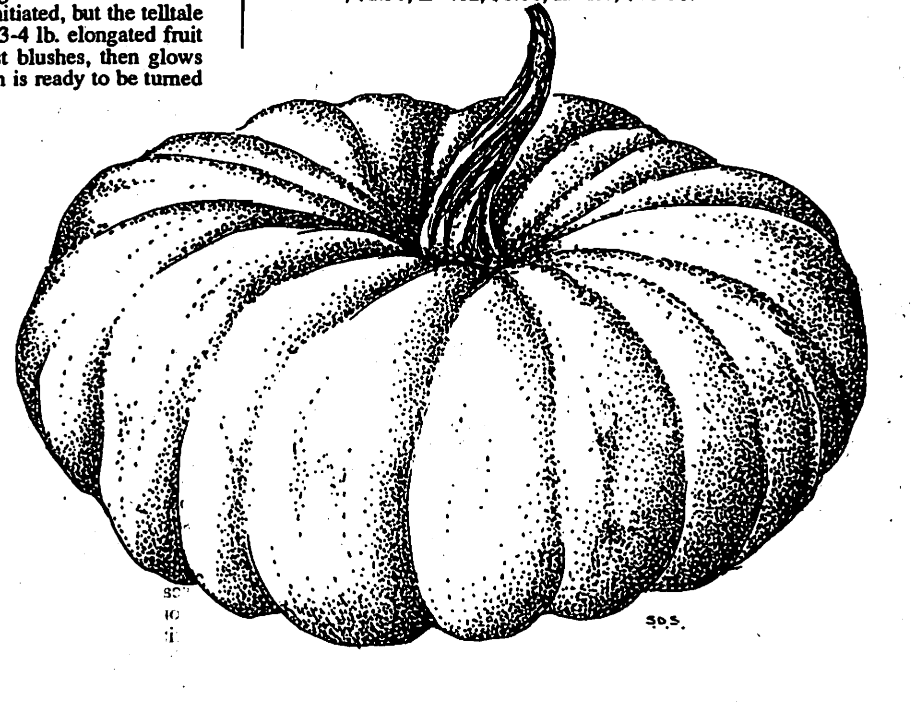
Today, at age 37, Drowns maintains more than 2,000 varieties on his 40-acre farm. Cucurbits remain his first love, but he is also keeping more than 300 tomatoes, 275 corns, 200 beans and 65 sweet potatoes. In Iowa, he has the benefits of a longer growing season, but also must cope with a host of southern insects which make growing squash a challenge. Whereas once the lack of soil and the short growing season limited him, today his logarithmic expansion is controlled "only by the fact that there's only 24 hours in a day." In addition to 8 1/2 acres of seed crops, he and his wife grow 1 1/2 acres for farmers market where they sell tons of Vidalia-type onions. In his spare time, Drowns teaches high school science.

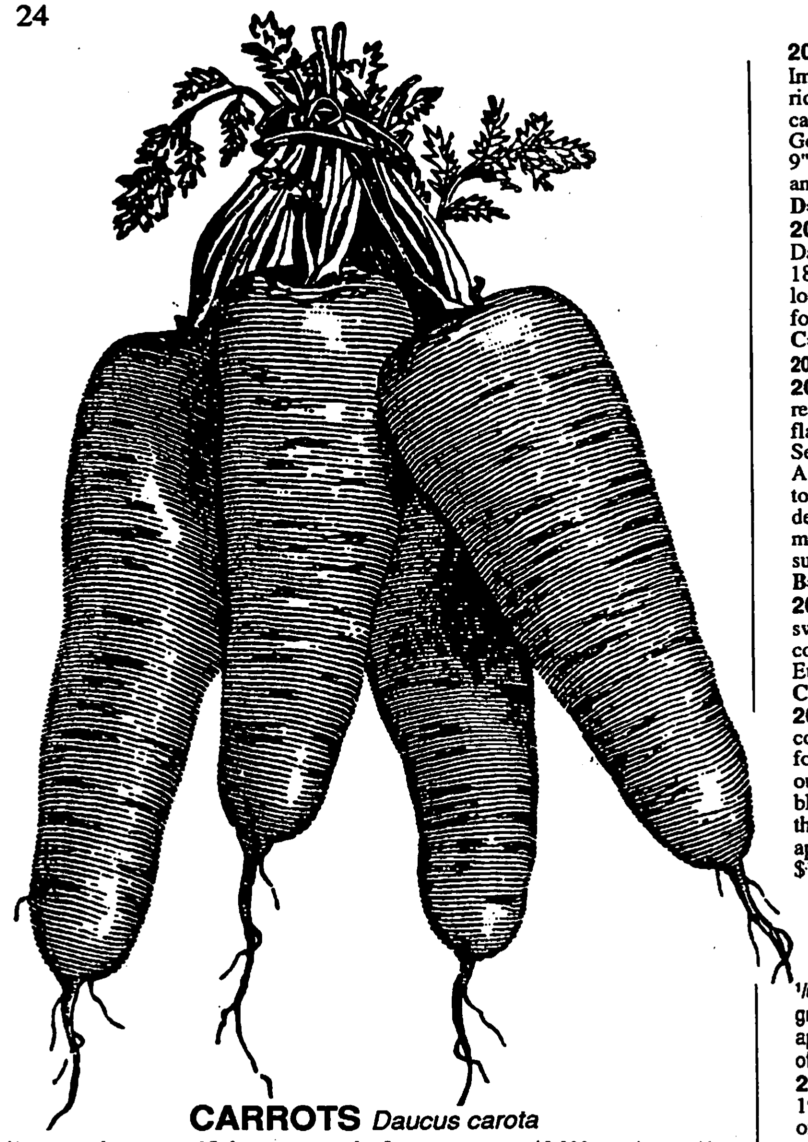
Glenn Drowns is energized by "a desire to save what was there" and a "constant curiosity to find out more about the genes." He is driven by the same passion that motivates us to offer so many unusual tomatoes. He doesn't want people to think that all tomatoes must be red, round and hard; he wants people to try different things. Orange Glo watermelon, a favorite oblong orange-fleshed melon, was one of his great triumphs at farmers market. When he took them the first time, some people even refused his free samples. The next week people were waiting in line to buy Orange Glo.

Other favorite melons include Cream of Saskatchewan (**#968** in our catalog) and Cantalun (a 2-3 lb. charantais melon with grey-green skin and a strong flavor). Among maxima he likes Sweet Meat Squash (**#1660**) and Arikara squash (for its history, insect tolerance and flavor). He is also partial to the Hawaiian tomato which sets flavorful tiny pea-sized fruits in clusters. Drowns saved the Golden Gopher muskmelon which is still my favorite. You can be sure Orange Glo, Cantalun, Arikara and Hawaiian will be in our 1999 trials.

1984 Lady Godiva (110 days) We regret crop failure. *Not available in 1999. We hope to have back in 2000.*

1992 Howden (115 days) *C. pepo* Open-pollinated. For years Howden has set the standard by which large round Jack O'Lanterns are measured. Three years ago, after numerous customer requests, we finally found a quality seed source. Howden is more symmetrical than Connecticut Field (far less likely to set lopsided fruit), with hard ridged skin and thick flesh. Fruits typically weigh 20-35 lb, yet often are able to ripen fully in our climate. Tolerant to black rot. If you ordered size E of Howden last year, please check your stock because a few such packets were incorrectly filled with Jack B Little seed (Howden seeds are large; Jack seeds small). Please contact us if you got a bad one. A=1/8oz, 80¢, ~16 seeds, B=1/4oz, $1.00, C=1/2oz, $1.50, D=1oz, $2.50, E=4oz, $6.00, K=1lb, $20.00.





CARROTS *Daucus carota*

1/8 oz packet sows 35 ft; 1 oz 280 ft. Carrots average 18,000 seeds/oz with significant variations among varieties. Very hardy. Early carrots can be sown by late April. Can take up to 3 weeks to germinate; keep rows from drying out for faster emergence. Sow carrots for winter storage in mid-late June. Thinning is critical: At 3" high thin to 1/2" apart, at 6" thin again to 1" apart. Fresh carrots are among the ten foods with the greatest increase in per capita consumption from 1978-1988. We now have separate spring and fall carrot plots in order to select varieties suitable for each season as most have a particular time when their flavor is best. Carrots are rich in the antioxidant beta-carotene. See also **#6833 and 6834**.

2008 Thumbelina (52 days) Open-pollinated. This 1992 All-America winner from Petoseed was the best tasting and most uniform of the Parisian types in our trial. Parisian carrots are suitable for even the heaviest clay soils because they make round balls 1 1/2" in diameter. They mature very early and are best harvested when they are young and tender. Cook them to bring out their delectable creamy texture. A=1/8oz, 80¢, B=1/2oz, $2.50, C=1oz, $5.00, D=4oz, $18.00, E=1lb, $70.00. *Not available in size K, order size E.*

2022 Minicor (55 days) Open-pollinated. If you prefer your first baby carrots of summer to be extremely slender roots with very small cores, choose Minicor. Amsterdam/baby Nantes-type boasts 6-7" roots with exceptionally sweet flavor. A=1/8oz, 80¢, B=1/2oz, $2.50, C=1oz, $3.00, D=4oz, $8.00, E=1lb, $28.00, K=5 lb, $125.00.

2042 Scarlet Nantes (68 days) Old-time favorite open-pollinated Nantes variety with bright orange roots averaging 6-7". A=1/8oz, 80¢, B=1/2oz, $2.50, C=1oz, $3.00, D=4oz, $7.00, E=1lb, $14.00, K=5 lb, $50.00.

2050 Nantes Fancy (68 days) A classy open-pollinated Nantes. Roots 7" long with unusually good color, flavor. Very uniform. Excellent keeper. Has been our most popular carrot for years. A=1/8oz, 80¢, B=1/2oz, $2.50, C=1oz, $4.00, D=4oz, $14.00, E=1lb, $28.00, K=5 lb, $125.00.

2058 Red Cored Chantenay (70 days) According to William Woys Weaver (See **#6578 Heirloom Vegetable Gardening**), this venerable open-pollinated heirloom originated in France around 1879 and "needs no improvement." Produces 5-7" thick red-orange roots which we found to have excellent carroty flavor in our September taste tests. Does well in heavy soils like ours. A=1/8oz, 80¢, B=1/2oz, $2.50, C=1oz, $4.00, D=4oz, $7.00, E=1lb, $14.00, K=5 lb, $50.00.

2068 Canada Gold (73 days) F-1 hybrid. Don't be put off by its Imperator parentage. Gold gets its long tapered look from Imperator, but its rich flavor from the Nantes side of the family. You won't find a tastier carrot to come out of the ground in fall or out of the root cellar in winter. Gold is crisp and carroty with a slender uniform shape that fills to the tip. Its 9" roots can be hard to pull. Our sales increased fivefold from 1995 to 1996 and have held steady since. A=1/8oz, 80¢, B=1/2oz, $2.50, C=1oz, $4.00, D=4oz, $14.00, E=1lb, $40.00. *Not available in size K, order size E.*

2076 Danvers 126 (75 days) Open-pollinated. This is a refinement of the Danvers Half-Long originated by market gardeners in Massachusetts in 1871. Danvers 126 is a tasty fall and storage carrot. Orange red roots 7-7 1/2" long, 2-2 1/2" across taper to a blunt end. Salzer's offered an ounce of seed for a dime and a pound for a dollar in 1927. A=1/8oz, 80¢, B=1/2oz, $2.50, C=1oz, $4.00, D=4oz, $7.00, E=1lb, $14.00, K=5 lb, $50.00.

2086-2098 All F-1 hybrids. 1 gram packet sows 10 ft.

2086 Mokum (48 days) Although we once dropped Mokum, we've since realized that its earliness, slenderness, and sweetness more than offset its flaws. Mokum won our summer taste tests in 1991, 1993 and 1994. This September it again bested 14 other varieties—all but one by a wide margin. A blunt Amsterdam-type which sizes extremely quickly with short weak tops, it should be harvested before the roots push out of the ground and develop green shoulders. Although not a versatile full-season carrot, Mokum merits succession planting so you can enjoy it young throughout the summer. Always the first to disappear from our spring patch. A=1g, 80¢, B=3g, $2.50, C=6g, $4.00, D=24g, $14.00. *Not available in larger sizes.*

2096 Nelson (56 days) We are pleased to have a seed crop again for this sweet, carroty Nantes. Smooth and uniform, 6-7" roots with deep orange color. Strong tops make it suitable for summer bunching. Widely grown in Europe; the seed comes from Bejo in Holland. A=1g, 80¢, B=3g, $2.50, C=6g, $4.00, D=24g, $14.00. *Not available in larger sizes.*

2098 Caroline (80 days) Winner of our 1996 fall carrot taste test, Caroline combines meaty Kuroda stock with sweet Chantenay. Sweet, but not crispy for eating out of hand. Although quite good raw, it requires cooking to bring out its full range of smooth-textured succulent creamy sweet flavor. Its blocky 7-8" roots with deep orange interior color make superb keepers. Our thanks to the customers who alerted us to this superior variety: We appreciate your suggestions! A=1g, 80¢, B=3g, $2.50, C=6g, $4.00, D=24g, $14.00. *Not available in larger sizes.*

OTHER ROOTS

BEETS *Beta vulgaris*

1/8 oz packet sows 20 ft, 1 oz about 180 ft. Hardy. Can be sown almost as soon as ground can be worked. Thin for use as greens. Lutz variety must be thinned to 4" apart, others require less rigorous thinning. Beets and beet greens are great sources of potassium which helps keep blood pressure down and reduces risk of strokes.

2108 Early Wonder Tall Top (48 days) Open-pollinated. Originated in 1911. Quick emergence in cold soil and attractive purple tops make this the one to grow for early beet greens and bunching beets. In 1998, we sold 111 one-pounders to market growers and over 1,480 A and B size packets to home gardeners. A=1/8oz, 50¢, ~270 seeds, B=1/2oz, $1.00, C=1oz, $1.50, D=4oz, $3.00, E=1lb, $5.00, K=5 lb, $24.00.

2120 Red Ace (50 days) F-1 hybrid. Sweet early season beets. Market growers appreciate its uniformity and perfect shape. Very similar to Early Wonder but more refined. Purple tops. Tolerant to CLS. A=1/8oz, 50¢, ~140 seeds, B=1/2oz, $1.50, C=1oz, $2.50, D=4oz, $7.00, E=1lb, $25.00, K=5 lb, $120.00.

2136 Chioggia (55 days) Open-pollinated. Also known as Bassano, for the Venetian hill town in which it originated. Staffer Bernice Nadler's favorite because "in addition to having good sweet beet flavor, they are beautiful when sliced." This heirloom home garden type attracts attention in the kitchen with its alternating interior rings of pink and white. Noteworthy also for its light red exterior color, green tops and exceptional sweetness. Almost as popular as Early Wonder. A=1/8oz, 50¢, ~350 seeds, B=1/2oz, $1.00, C=1oz, $1.50, D=4oz, $3.00, E=1lb, $10.00, K=5 lb, $50.00.

2146 Burpee's Golden (55 days) We regret that the crop has failed for the second year in a row. *Not available in 1999.*

2156 Formanova (56 days) Open-pollinated. Also known as Forono and Cylindra. Cylindrical beet grows 6" long. A good pickling or processing beet. Heirloom from the 1880s. A=1/8oz, 50¢, ~295 seeds, B=1/2oz, $1.00, C=1oz, $1.50, D=4oz, $4.00, E=1lb, $12.00, K=5lb, $60.00.

2170 Lutz Green Leaf (60 days) Open-pollinated. Also known as Winter Keeper, the best beet to grow for winter storage. Fruits remain sweet even when large. Tops are glossy green without any purple. For good-sized roots thin to 4" apart. For a special sweet treat, try baking big ones for about an hour. Heirloom variety from Europe. Available from Maule's 1935 seed book for 20¢ an ounce. A=1/8oz, 50¢, ~195 seeds, B=1/2oz, $1.00, C=1oz, $1.50, D=4oz, $4.00, E=1lb, $12.00, K=5lb, $60.00.

2182 Detroit Dark Red Medium Top (60 days) Open-pollinated. Standard late variety for home gardeners and canners. Globular smooth uniform roots with tender oxblood-red flesh. Variety dates back to 1892. A=1/8oz, 50¢, ~295 seeds, B=1/2oz, $1.00, C=1oz, $1.50, D=4oz, $3.00, E=1lb, $5.00, K=5lb, $24.00.

RADISHES *Raphanus sativus*

1/8 oz packet sows 15 ft, 1 oz 100 ft. Hardy. Can be sown early. Summer radishes easy to grow, quick to ripen and go by; make succession plantings. Require thinning to at least 2" for attractive uniform roots. Daikon and winter radishes take longer to mature, hold longer, require only 1 planting and need to be thinned to 6" apart. Pinch the tops if winter radishes start to bolt to seed.

2214 Cherry Belle (25 days) Open-pollinated. A good smooth red-skinned bunching radish making uniform balls 3/4" across with firm white flesh. 1949 AAS. A=1/8oz, 50¢, ~700 seeds, B=1/2oz, $1.00, C=1oz, $1.50, D=4oz, $3.00, E=1lb, $5.00, K=5lb, $20.00.

2224 Easter Egg (25 days) Open-pollinated. Kids love this fascinating radish which comes in shades of pink, purple, red, violet and white. Good even large. Our most popular radish. A=1/8oz, 50¢, ~320 seeds, B=1/2oz, $1.00, C=1oz, $1.50, D=4oz, $4.00, E=1lb, $12.00, K=5lb, $55.00.

2234 Champion (25 days) Open-pollinated. Smooth scarlet roots with firm mild flesh grow quickly to edible size. 1957 AAS. A=1/8oz, 50¢, ~320 seeds, B=1/2oz, $1.00, C=1oz, $1.50, D=4oz, $3.00, E=1lb, $5.00, K=5lb, $20.00.

2240 Hailstone (25 days) Open-pollinated. A crisp round juicy white radish, not very hot. 1" in diameter. Holds well. A=1/8oz, 50¢, ~400 seeds, B=1/2oz, $1.00, C=1oz, $1.50, D=4oz, $3.00, E=1lb, $5.00, K=5lb, $20.00.

2248 French Breakfast (26 days) Open-pollinated. Medium-length scarlet root with a white tip. Old favorite from Europe in 1879. A=1/8oz, 50¢, ~500 seeds, B=1/2oz, $1.00, C=1oz, $1.50, D=4oz, $3.00, E=1lb, $5.00, K=5lb, $20.00.

2252 Plum Purple (26 days) Open-pollinated. This lovely round plum-colored root with crisp white flesh has a good sweet taste with only a little heat. Very uniform, true to color, almost the size of a ping-pong ball. With Plum Purple, Hailstone and Champion, you can make your own tricolor mix. NEW! A=1/8oz, 50¢, ~500 seeds, B=1/2oz, $1.00, C=1oz, $1.50, D=4oz, $4.00, E=1lb, $12.00, K=5lb, $55.00.

2264 White Icicle (30 days) Open-pollinated. Also known as Lady Finger, heirloom was listed by Fearing Burr as White Naples, White Italian and White Transparent. Firm tender all-white roots for the home garden penetrate up to 6" if soil is not too heavy. Mild if harvested when young and slender. A=1/8oz, 50¢, ~440 seeds, B=1/2oz, $1.00, C=1oz, $1.50, D=4oz, $3.00, E=1lb, $5.00, K=5lb, $20.00.

2268 Misato Rose (60 days) Open-pollinated. A big white radish with green shoulders, Misato doesn't look like much on the outside, but shows its beauty when sliced. Cross-sections have a rosy red center that radiates to pink then to white. Worthwhile for looks alone; taste is its best feature. Plenty of spiciness with a rich sweet vegetable undertone and no harsh sharpness. Will grow as large as a big beet if given sufficient space. For autumn crops, good keeper. A=1/8oz, $1.00, ~320 seeds, B=1/2oz, $3.00, C=1oz, $5.00, D=4oz, $16.00, E=1lb, $60.00.

2270 Round Black Spanish (65 days) Open-pollinated. We chose venerable Black Spanish, an heirloom some trace back to the sixteenth-century conquistadores, as the first winter radish for our list. Turnip-shaped 4" roots with corklike black exteriors have pungent white flesh which loses some heat when boiled or stir-fried. Can be stored like carrots and beets in slightly moistened sand in the root cellar. A=1/8oz, 50¢, ~320 seeds, B=1/2oz, $1.00, C=1oz, $1.50, D=4oz, $3.00, E=1lb, $5.00, K=5lb, $20.00.

2282 Omny Daikon (65 days) F-1 hybrid. *Daikon* means "big root" in Japanese. According to Takii, more acreage is planted to daikon than any other vegetable crop in Japan. Omny is a refined daikon for market growers. Roots are fatter, shorter and have a classier appearance than Tokinashi. They grow vigorously in cool soil and are very slow to bolt. Black rot, soft rot and virus resistant. A=1g, 50¢, ~80 seeds, B=1/2oz, $5.00, C=1oz, $9.00. *Not available in larger sizes.*

PARSNIPS *Pastinaca sativa*

1/8 oz packet sows 25 ft, 1 oz about 200 ft. One of the best for grating and stuffing into eggrolls, strudels and veggie pies. Harvest some after frost for late fall delights. The remainder will taste even sweeter in the spring after overwintering! Seed is short-lived; if you are planning to use old seed, germ test in paper towels before sowing. All open-pollinated.

2306 Andover (120 days) If you have good soil tilth you'll appreciate Andover, a refined tapered cylindrical root which will grow up to 14" long. A knockout in our 1996 parsnip trial. Developed by the University of Minnesota. A=1/8oz, 50¢, B=1/2oz, $1.00, C=1oz, $1.50, D=4oz, $5.00, E=1lb, $16.00.

2310 Harris Model (120 days) Sweet-flavored smooth tapered roots average 10". For better performance, prepare raised beds, especially in heavy soils. Don't believe stories that this strain is running down. It looked great in our 1996 trials. A=1/8oz, 50¢, ~800 seeds, B=1/2oz, $1.00, C=1oz, $1.50, D=4oz, $3.00, E=1lb, $5.00, K=5lb, $24.00.

SCORZONERA *S. hispanica*

2322 Scorzonera (120 days) Open-pollinated. This long narrow dark-skinned white-fleshed root has an unprepossessing appearance, yet is prized by gourmet cooks in Europe who call it the oyster plant for its distinctive flavor and use it in place of the potato in *haute cuisine*. Its name derives from the Spanish *corteza negra* or "black bark." Has a firm delightful texture almost like pudding, but is not sweet like many root vegetables. Much of the flavor resides in the dark skin which should not be peeled before cooking. Culture like parsnips, overwintering in the field and pulling as needed. Tastes better after a hard frost. Has only limited storage in root cellars. Seed is short-lived; germ test old seed in paper towels before using. A=1/8oz, 50¢, ~250 seeds, B=1/2oz, $1.00, C=1oz, $1.50, D=4oz, $5.00, E=1lb, $16.00.

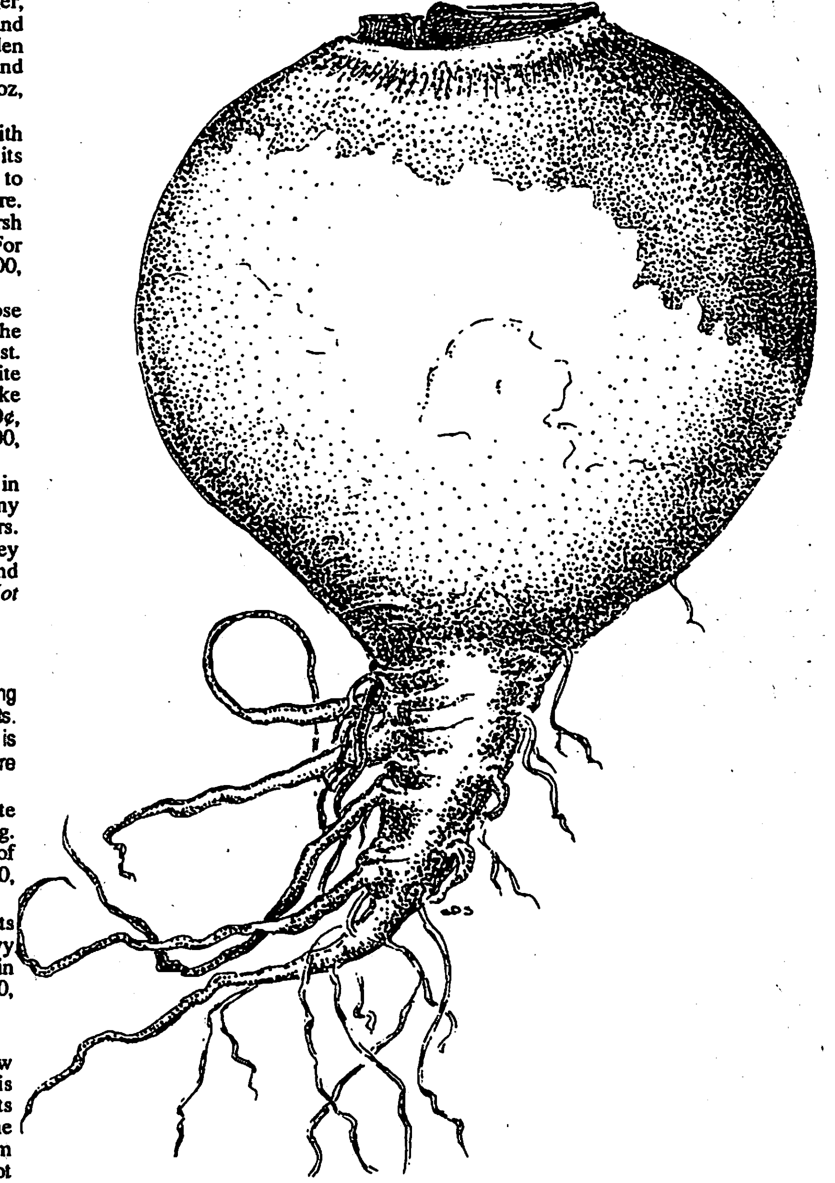
RUTABAGAS & TURNIPS

1/8 oz packet sows almost 40 ft, 1 oz about 400 ft. Hardy members of Crucifer family. Thinning is critical for full-sized roots. All open-pollinated. See also **#6836**.

2358 Laurentian Rutabaga (95 days) *Brassica napus* Popular Canadian variety with deep purple crown and cream yellow base. Uniform 5-6" almost neckless roots suitable for winter storage, larger and sweeter than American Purple Top, which it replaced. Pale yellow flesh has refined texture and taste. A=1/8oz, 50¢, ~1120 seeds, B=1/2oz, $1.00, C=1oz, $1.50, D=4oz, $3.00, E=1lb, $5.00, K=5lb, $20.00.

2378 Purple Top White Globe Turnip (50 days) *B. rapa* Popular variety with purple tops, white bottoms and white flesh. An heirloom from before 1880. A=1/8oz, 50¢, ~1,750 seeds, B=1/2oz, $1.00, C=1oz, $1.50, D=4oz, $3.00, E=1lb, $5.00, K=5lb, $20.00.

2392 Gilfeather® Turnip (85 days) *B. n.* Heirloom variety either developed or discovered by John Gilfeather (1865-1944) of Wardsboro, VT, in the late 1800s. Gilfeather, a lanky secretive man, is said to have cut the tops and bottoms off his turnips so that no one else could propagate them. Nevertheless, some seeds escaped to a neighbor who gave them to market growers William and Mary Lou Schmidt, who salvaged them, then commercialized the variety. Gilfeather is sweeter and later to mature than other turnips, and not woody even at softball size. Really more like a rutabaga than a turnip. The white flesh tastes better after frost. Doug Wittmer of Upton, MA, called it "the best-tasting turnip I've ever grown." He also had high praise for the greens, which he described as "tender, mild and lacking spines." Packet sows almost 20'. A=1g, 50¢, ~500 seeds, B=1/2oz, $5.00, C=1oz, $8.00. *Not available in larger sizes.*



1752 Shenot Crown of Thorns (95 days) *C. p.* var. *ovifera* These small gourds have pointed ribs that look like teeth. Sometimes called Ten Commandments because the finger-like projections always number ten. Often called Ghost Gourd because of its white cream color and weird shape. Kids love to paint faces on their smooth surfaces for Halloween decorations. A=1/8oz, 80¢, ~71 seeds, B=1/4oz, $1.50, C=1/2oz, $2.50, D=1oz, $4.00, E=4oz, $14.00.

1754 Colored Crowns Mix (95 days) *C. p.* var. *ovifera* Like Shenot, has the ten pointed "toothed" ribs; unlike Shenot, comes in two green versions. One is green-tinted white, sporting flecked light green stripes between the ribs. The other has dark green stripes along the ribs, particularly at the tooth points, against a flecked light green background. The handsome small fruits weigh almost exactly 1lb. **NEW!** A=1/8oz, 80¢, B=1/4oz, $1.50, C=1/2oz, $2.50, D=1oz, $4.00, E=4oz, $14.00.

1762 Luffa (110 days) *Luffa ægyptiaca* May be more closely related to the cucumber than to the hardshell Lagenaria. Also known as the dishrag gourd, dried and used for making bath sponges. Andrea and Danny Morris of Amherst, MA point out that Luffa is "very tasty and edible when picked young—great when presteamed then...panfried with onions, garlic and curry!" *Caution: Luffa requires a long season. Start indoors and culture like melons*. We recommend trellising if you want your squashes to remain straight. A=1/8oz, 80¢, ~36 seeds, B=1/4oz, $1.50, C=1/2oz, $2.50, D=1oz, $4.00, E=4oz, $14.00.

1764 Chinese Bottle (120 days) *Lagenaria siceraria* These big gleaming green gourds provided the most sublime moment of our 1997 trials. They just took my breath away at first sight with their productivity and graceful beauty. At our display at Common Ground Fair we were inundated with requests for seed. Never mind seed, many people just wanted to take the whole display home! 1' high fruits boast bottom bowl 8-9" in diameter with a stout neck (shorter than the regular bottle gourd) and small upper swelling. Very prolific fruit set; each plant *matures* 8 fruit on average, almost all of consistent good shape. A=1/8oz, 80¢, B=1/4oz, $1.50, C=1/2oz, $2.50, D=1oz, $4.00, E=4oz, $14.00.

Curing *Lagenaria* Gourds is Easy.

Hardshell gourds are 90% water at harvest. They need to be cured or dried, a slow process of evaporation through the outer shell, which is covered by a thin ivory-green skin. Curing can take 6 weeks to 1 year (average time 4 months) depending on gourd size, thickness of shell, weather and storage conditions.

Immature gourds (which have not developed a thick shell) will rot after harvest. Mature gourds are large and weighty. To cure, store off the ground in a well-ventilated room or unheated outbuilding. For a smooth beige surface, scrape off the outer skin after it loosens and darkens. (Freezing and thawing loosens the outer skin.) Outer skin, if left on, may become moldy; mold-patterned skin will dry to the gourd shell and can be sanded off, incorporated into the decoration or painted over.

1766 Large Bottle (120 days) *L. s.* Beware, these vines are rampant crawlers. According to Mass. market grower Eva Sommaripa, this variety makes a better birdhouse than the birdhouse gourd. Eva suggests cutting a hole about the size of a quarter with a paring knife. Take out at least some of the innards. Wrap a wire for hanging around the indented waist, fasten a loop of non-rusting wire or nylon cord around a branch, and the wrens (or other species if you're too far north for wrens) will come. Don't hang gourds too close together, as these birds are territorial. Wrens usually nest twice a season, once in May and once in July, so you have two chances. If you take the gourd inside for the winter, it will probably last a second season. A=1/8oz, 80¢, ~48 seeds, B=1/4oz, $1.50, C=1/2oz, $2.50, D=1oz, $4.00, E=4oz, $14.00.

1768 Speckled Swan (120 days) *L. s.* Stole the show in our booth decoration at the 1998 Common Ground Fair; everybody who saw them wanted one. Beautiful surface is dark green with very pale green 1" splotches which bleed like strokes from a paintbrush. Large round 8-10" base tapers into graceful long neck, sometimes straight, sometimes arched, capped by a small bulb near the stem which looks like a swan's head. If you need a clearer picture, check out the supermarket scene in the movie Pecker which features these gourds. **NEW!** A=1/8oz, 80¢, B=1/4oz, $1.50, C=1/2oz, $2.50, D=1oz, $4.00, E=4oz, $14.00.

1772 Corsican Canteen (125 days) *L. s.* Sets 3-6 fruits per plant, shaped like an old-fashioned canteen with height of 3 1/2" and a 7" diameter, some larger. Will make lovely lidded bowls. Originally from Native Americans in New Mexico. A=1/8oz, 80¢, ~30 seeds, B=1/4oz, $1.50, C=1/2oz, $2.50, D=1oz, $4.00, E=4oz, $14.00.

1778 Siphon (125 days) *L. s.* With their small 5" bulged bottoms and long elegantly curved necks, these looked like swans. The neck curls naturally if not grown on a trellis and can grow to an astounding 5' long. Grow around a broom handle to mould neck into a spiral. A=1/8oz, 80¢, ~ 25 seeds, B=1/4oz, $1.50, C=1/2oz, $2.50, D=1oz, $4.00, E=4oz, $14.00.

1784 Maranka (130 days) *L. s.* Also known as Dinosaur Gourd. Squash grower Hollar calls them "one of the oddest of the Lagenaria." Maranka makes hard-shelled dark green 10-14" long shiny fruits with knobby protrusions or ridges. Graceful neck curves and tapers at the stem end, though will grow straight if supported. *Caution: Requires a longer season than most other Lagenaria, although I have seen beautiful specimens grown in Maine*. A=1/8oz, 80¢, ~25 seeds, B=1/4oz, $1.50, C=1/2oz, $2.50, D=1oz, $4.00, E=4oz, $14.00.

1790 Bushel (135 days) *L. s.* Shaped like a large bowl with a pot lid on it. Can grow enormous given sufficient heat, but in Maine will probably max out at 18" across. *Caution: requires a long season to mature*. To improve your chances limit each vine to one fruit. Prune to halt vine growth after it sets its first fruit. A=1/8oz, 80¢, ~15 seeds, B=1/4oz, $1.50, C=1/2oz, $2.50, D=1oz, $4.00, E=4oz, $14.00.

FANCY WINTER SQUASH

1810 Festival (84 days) *Cucurbita pepo* F-1 hybrid. Festival was the surprise of our October squash tasting feast at North Hell Farm in cold Athens, ME. We knew it was a pretty face, looking as if it were painted to show the beauty of Autumn. But we weren't prepared for the delectable sweetness of the yellow flesh. We took a few bites out of the Acorn, the Cushaw and the Orange Dawn, then passed them on to the dogs, but we ate the Festival right down to the skin. Shaped like Sweet Dumplings, the 1 1/2 lb. yellow fruits streaked with orange have so much eye appeal that they will almost literally walk away from your stand. Better yet, your customers will want more once they've had a taste. Semi-bush vines conserve space. **NEW!** A=1/8oz, 80¢, ~22 seeds, B=1/4oz, $1.50, C=1/2oz, $2.50, D=1oz, $4.00, E=4oz, $14.00, K=1lb, $55.00.

1812 Burpee's Early Acorn Hybrid (84 days) *C. p.* F-1 hybrid. I was very surprised to discover that acorn squash can be this good. Sweeter and drier than other acorns we've tried, Burpee's top-quality fruits get up to 4 lb., yet ripen a week ahead of Table Queen. Saves some space with its large bush habit. A=1/8oz, 80¢, ~35 seeds, B=1/4oz, $1.50, C=1/2oz, $3.00, D=1oz, $5.00, E=4oz, $20.00, K=1lb, $70.00.

1820 Sweet Mama (88 days) *C. maxima* F-1 hybrid. If you like buttercup squash you should try Sweet Mama, a grey-green drum-shaped buttercup type with rounded shoulders and without the cup. Significantly earlier than Burgess with outstanding sweet flavor. My favorite large winter squash, Mama will interest commercial growers as well as home gardeners. 1979 All-America winner. A=1/8oz, $1.20, ~22 seeds, B=1/4oz, $2.00, C=1/2oz, $4.00. 190 seeds/oz. *Not available in larger sizes, order size C.*

1832 Pasta Spaghetti (90 days) *C. pepo* F-1 hybrid. If you find Spaghetti squash bland, you may want to try Pasta. Its rich yellow flesh has a flavor that stands on its own, not just as the underpinning for traditional spaghetti toppings. Dorothy LeGeyt grew them for the first time in 1997 and became a convert. She described Pasta as "great for vegetarians and non-grain pasta fans!" Medium-vined plants set 8" cream-colored 2-2 1/2 lb. fruits which ripen to a light yellow. A=1/8oz, 80¢, ~23 seeds, B=1/4oz, $1.50, C=1/2oz, $2.50, D=1oz, $4.00, E=4oz, $14.00, K=1lb, $55.00.

1842 Delicata (100 days) *C. p.* Open-pollinated. Also known as Sweet Potato squash. Dates back to 1894. After falling out of favor for many decades, it has regained such popularity recently that we now sell more packets than of any other winter squash. Not only are the ivory-colored fruits with dark green stripes lovely, but also the flavor is unsurpassed. Fruits are small, weigh 1-2 lb. and are good keepers. In storage the green stripes turn a delicate orange and the cream background sometimes yellows. We go through a lot of them each season, slicing them and baking them for a sweet treat! We offer a select strain with oval fruits that has proven superior in trials. Its silvery leaves also add a touch of decoration to the squash patch. *This lot of seed contains approximately 10% gourd off-types.* Rogue *out any plants with white flowers*. A=1/8oz, 80¢, ~22 seeds, B=1/4oz, $1.50, C=1/2oz, $2.50, D=1oz, $4.00, E=4oz, $14.00, K=1lb, $40.00. 170 seeds/oz.

1850 Sweet Dumpling (100 days) *C. p.* Open-pollinated. Sometimes we underrate our selections. We always offered Sweet Dumpling because its 1-1 1/2 lb. ivory-colored fruits with green stripes, shaped somewhat like miniature pumpkins, look so stunning that they sell themselves on the stand. A couple years ago Nikos and I taste-tested Dumpling alongside look-alike newcomer Heart of Gold. Heart was good, but Dumpling was better. Although underripe Dumpling fruits taste starchy and insipid, the sweet dry orange flesh of the fully ripe ones is memorably rich. A=1/8oz, 80¢, ~55 seeds, B=1/4oz, $1.50, C=1/2oz, $2.50, D=1oz, $4.00, E=4oz, $14.00, K=1lb, $50.00. 440 seeds/oz.

1866 Baby Blue Hubbard (95 days) *C. maxima* Open-pollinated. A scaled-down version of Blue Hubbard, Baby Blue's vines are much more compact and its fruits much smaller (about 4-5 lbs.) than its counterpart, without sacrificing much quality. A=1/8oz, 80¢, ~40 seeds, B=1/4oz, $1.50, C=1/2oz, $2.50, D=1oz, $4.00, E=4oz, $14.00, K=1lb, $30.00.

1874 Red Kuri (92 days) *C. m.* Open-pollinated. Also called Uchiki Kuri. While all agree the spectacular red-orange fruits are among the most attractive squashes, comments on their flavor have ranged from "the best winter squash" to "glorified zucchini, flavor like water." Liking the dry flesh of this Japanese squash, we think the truth lies somewhere in between. Very popular at roadside stands. Teardrop-shaped fruits avg. 3-4 lb. A=1/8oz, 80¢, ~13 seeds, B=1/4oz, $1.50, C=1/2oz, $2.50, D=1oz, $5.00, E=4oz, $18.00, K=1lb, $70.00.

1878 Honey Delight (95 days) *C. m.* F-1 hybrid. Squash lovers divide into two main camps: supporters of sweet moist flesh and devotees of dry nutty meats. Honey Delight is to dry squash what Buttercup is to moist. Roberta lobbied for inclusion of her favorite dry Japanese Kubocha-type for several years. After more tasters confirmed its superiority over others of the genre, we added it in 1998. Its flesh is as sweet and flavorful as its name implies. Flattened round 5-6 lb. dark green fruits with a silvery mottled overlay are good keepers. A=1/8oz, $1.20, ~20 seeds, B=1/4oz, $2.00, C=1/2oz, $4.00, D=1oz, $8.00, E=4oz, $28.00, K=1lb, $100.00.

1892 Green Hokkaido (98 days) *Crop failure, no seed available. We hope to have back in 2000.*

PUMPKINS

1922 Jack Be Little (95 days) *C. pepo* Tiny ornamental open-pollinated pumpkins weigh only about a half pound. They're great for decorations and a big hit with kids. Also good to eat, said to be excellent stuffed. Flattened, heavily ribbed with vigorous stems. A=1/8oz, 80¢, ~59 seeds, B=1/4oz, $1.50, C=1/2oz, $2.50, D=1oz, $4.00, E=4oz, $16.00.

1936 Autumn Gold (98 days) *C. p.* F-1 hybrid. Even northernmost growers can vine-ripen medium-sized pumpkins with 1987 AAS Autumn Gold. Commercial growers love its "precocious yellow" gene which ensures no green pumpkins at harvest. Instead, immature fruits are yellow, ripening to a deep orange, ribbed, with good handles, 10-15 lb. average. A=1/8oz, 80¢, B=1/4oz, $1.50, C=1/2oz, $2.50, D=1oz, $4.00, E=4oz, $14.00, K=1lb, $55.00.

1952 Lumina (100 days) *C. maxima* Open-pollinated. According to the lead article in the Sept. 23 food section of the Boston Globe, Lumina's "sweet yellow flesh with lustrous ivory skin...has captivated cooks." A "ghostly" white pumpkin that kids will love, Lumina is also excellent for both carving and painting. The fruit are 8-10" high and average 12 lb., though size varies with growing conditions. As long as it is kept away from frost, Lumina stores well, so a face painted on its smooth surface will last for weeks instead of days. Globe correspondent Victoria Riccardi also suggests that Luminas make stunning holders for soups and stews. Under stress, the fruit may develop blue patches. Lumina originated as a chance sport in one of Hollar's California pumpkin fields about eight years ago. PVP. A=1/8oz, 80¢, ~13 seeds, B=1/4oz, $1.50, C=1/2oz, $2.50, D=1oz, $4.00, E=4oz, $14.00, K=1lb, $50.00.

1956 Long Pie (102 days) *C. pepo* Open-pollinated. At its best, our work takes me back to childhood, searching for buried treasure, unearthing artifacts which tell a story comprised of equal parts folklore and verifiable history. Here is a true Maine heirloom, widely grown in Androscoggin County sixty years ago, now almost forgotten, but deserving revival because its full-bodied orange flesh makes the best pumpkin pies we've ever had. Sometime in the late 1980s LeRoy Souther brought the seeds to the Common Ground Fair where cucurbit aficionado John Navazio had a booth. More than 30 years before, a Livermore Falls neighbor, Harry Hurd, had given seeds to Souther. Supposedly, Long Pie originated on the Isle of St. George in the Azores, came to Nantucket on a whaling ship in 1832, and was at first known as the Nantucket Pumpkin as it migrated north to Maine. Long Pie looks like an overgrown zucchini to the uninitiated, but the telltale sign is an orange spot where the otherwise all-green 3-4 lb. elongated fruit rested on the ground. In storage, the whole fruit first blushes, then glows bright orange, signalling that the delicious flesh within is ready to be turned into incomparable pies. We are pleased to be able to complete the circle by returning some seeds to the Southers who have not had them for a few years. Seed grown in Maine without pesticides, herbicides or chemical fertilizers. **NEW!** A=1/8oz, 80¢, ~13 seeds, B=1/4oz, $1.50, C=1/2oz, $2.50, D=1oz, $4.00, E=4oz, $14.00. *Not available in size K, order size E.*

1968 Rouge Vif d'Étampes (105 days) *C. maxima* Open-pollinated. Also known as Cinderella. This spectacular French heirloom turns the pumpkin patch into a glowing blaze with its deeply ridged burnt-orange to red fruits. Pumpkins are flat, quite variable in size, ranging from about 7 lb. to upwards of 30 lb. and make great decorative Jack O'Lanterns. Kids are really intrigued by their color. Strictly speaking, this is a squash, not a pumpkin, and the flesh is not as deep orange or as flavorful as that of the pie pumpkins. Originated in France in the early 1800s and was introduced to the US by Burpee in 1883. A=1/8oz, 80¢, ~13 seeds, B=1/4oz, $1.50, C=1/2oz, $2.50, D=1oz, $4.00, E=4oz, $14.00, K=1lb, $50.00.

Glenn Drowns

Glenn Drowns could be called the Mozart of seed savers. He was gathering seeds from weeds as soon as he could walk. By age 5 he had his own 500 sq. ft. garden. By 8, he had taken over his whole family's garden and started ordering his own seed. By 13 he was saving his own seed, and by 16 growing more than sixty varieties of cucurbits, had figured out on his own how to do crosses and had begun breeding, hoping to find a short-season watermelon that would mature in his unforgiving Northern Idaho climate.

By the time he was 21, his Blacktail Mountain had stabilized. Not only was he successful in breeding a watermelon that was five days earlier than New Hampshire Midget, but he also unintentionally created one with unusual keeping qualities. Three years later, he collaborated with Kent and Aaron Whealy to create the Seed Savers Exchange's first preservation garden, a five-acre grow-out of more than 2,000 varieties (including 370 of Drowns' squashes) that was successful despite the worst drought in Iowa in 75 years.

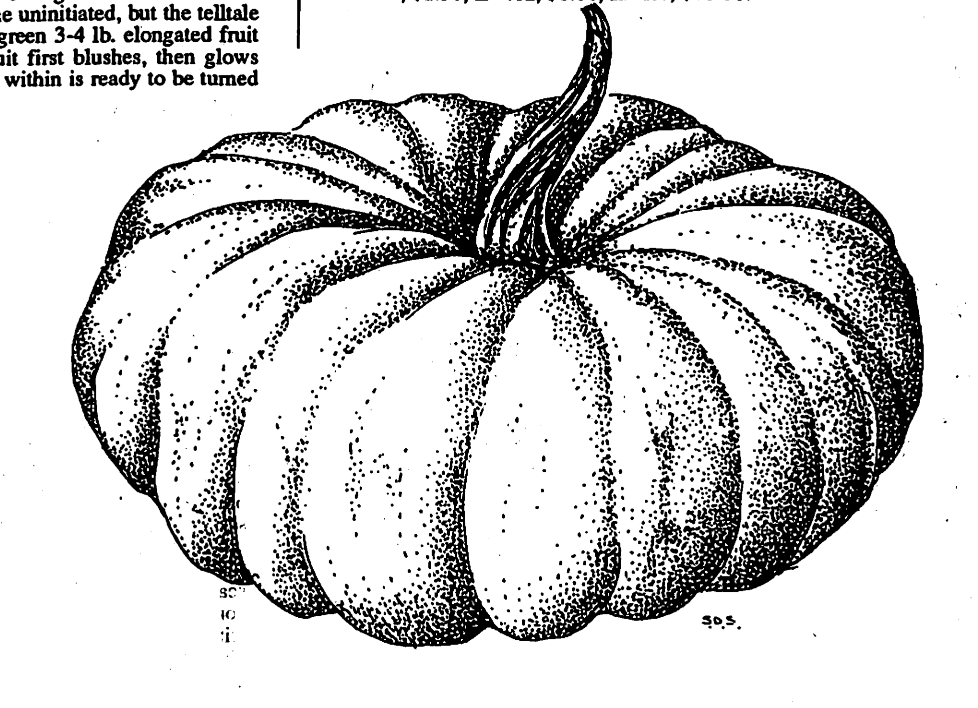
Today, at age 37, Drowns maintains more than 2,000 varieties on his 40-acre farm. Cucurbits remain his first love, but he is also keeping more than 300 tomatoes, 275 corns, 200 beans and 65 sweet potatoes. In Iowa, he has the benefits of a longer growing season, but also must cope with a host of southern insects which make growing squash a challenge. Whereas once the lack of soil and the short growing season limited him, today his logarithmic expansion is controlled "only by the fact that there's only 24 hours in a day." In addition to 8 1/2 acres of seed crops, he and his wife grow 1 1/2 acres for farmers market where they sell tons of Vidalia-type onions. In his spare time, Drowns teaches high school science.

Glenn Drowns is energized by "a desire to save what was there" and a "constant curiosity to find out more about the genes." He is driven by the same passion that motivates us to offer so many unusual tomatoes. He doesn't want people to think that all tomatoes must be red, round and hard; he wants people to try different things. Orange Glo watermelon, a favorite oblong orange-fleshed melon, was one of his great triumphs at farmers market. When he took them the first time, some people even refused his free samples. The next week people were waiting in line to buy Orange Glo.

Other favorite melons include Cream of Saskatchewan (#968 in our catalog) and Cantalun (a 2-3 lb. charantais melon with grey-green skin and a strong flavor). Among maxima he likes Sweet Meat Squash (#1660) and Arikara squash (for its history, insect tolerance and flavor). He is also partial to the Hawaiian tomato which sets flavorful tiny pea-sized fruits in clusters. Drowns saved the Golden Gopher muskmelon which is still my favorite. You can be sure Orange Glo, Cantalun, Arikara and Hawaiian will be in our 1999 trials.

1984 Lady Godiva (110 days) We regret crop failure. *Not available in 1999. We hope to have back in 2000.*

1992 Howden (115 days) *C. pepo* Open-pollinated. For years Howden has set the standard by which large round Jack O'Lanterns are measured. Three years ago, after numerous customer requests, we finally found a quality seed source. Howden is more symmetrical than Connecticut Field (far less likely to set lopsided fruit), with hard ridged skin and thick flesh. Fruits typically weigh 20-35 lb, yet often are able to ripen fully in our climate. Tolerant to black rot. If you ordered size E of Howden last year, please check your stock because a few such packets were incorrectly filled with Jack B Little seed (Howden seeds are large; Jack seeds small). Please contact us if you got a bad one. A=1/8oz, 80¢, ~16 seeds, B=1/4oz, $1.00, C=1/2oz, $1.50, D=1oz, $2.50, E=4oz, $6.00, K=1lb, $20.00.



LETTUCE BEGIN *Lactuca sativa*

1 gram packet sows 25 ft; 2 grams 50 ft; 1 oz 500-700 ft. May be started indoors in March and at regular intervals thereafter, or sowed outdoors as soon as ground can be worked. Most varieties won't germinate at temperatures above 75°. Hardy. All save icebergs tolerate heavy frost. Grow best in cool weather with ample moisture, many kinds suffer bottom rot and tipburn in heat; select summer varieties carefully. Sow every 2 weeks for continuous supply. Lettuce will not head unless thinned frequently & ruthlessly to final distance of 1'. Heavy nitrogen feeders. Lettuces are leaf types except where specified. Early in this century people discovered that lettuce can be eaten raw. Now people are rediscovering cooked lettuce. Try it in soups or wilted over sautéed onions. Our extensive lettuce trial is always a colorful early summer highlight at Shooting Star Farm. U.S. consumption of fresh lettuce is 27.6 lb. per capita per year. **Varieties in this section average 1,750 seeds/pkt. All lettuce is open-pollinated.** Seed also **#6850-6852**.

2710 Black Seeded Simpson (42 days) The earliest and most popular looseleaf variety. Large loose crumpled juicy light-green leaves. Does not stand heat well; sow early as the ground can be worked. Heirloom variety introduced by Peter Henderson & Co. of New York in the 1870s. Hirschy offered it for 4¢ per packet in 1890. A=2g, 50¢, B=4g, $1.00, C=14g, $1.50, D=28g, $3.00, E=112g, $5.00, K=448g, $10.00.

2722 Salad Bowl (46 days) Bright-green notched leaves form compact rosette. Stands hot weather better than Black Seeded Simpson. 1952 All-America winner. A=2g, 50¢, B=4g, $1.00, C=14g, $1.50, D=28g, $3.00, E=112g, $5.00, K=448g, $10.00.

2728 Red Salad Bowl (46 days) Compact rosettes of spectacular bronze-red oakleaves. Has become one of our most popular lettuces. We sold 90 pounds of seed in 1998, the bulk of it to mesclun growers. A=2g, 50¢, B=4g, $1.00, C=14g, $1.50, D=28g, $3.00, E=112g, $5.00, K=448g, $10.00.

2734 Tom Thumb Baby Bibb (46 days) Miniature butterhead type which makes a small tightly bunched head early. Good for garnishes. Outer leaves light-medium green, centers creamy white. Very attractive for early markets. William Woys Weaver has untangled its knotted history. It was introduced in England by H. Wheeler & Sons in 1858 and came to the States ten years later courtesy of James J. H. Gregory. A=2g, 50¢, B=4g, $1.00, C=14g, $1.50, D=28g, $3.00, E=112g, $5.00, K=448g, $10.00.

2740 Bronze Mignonette Baby Bibb (46 days) This small ruffled bronze-tinged butterhead captivated me in the 1992 trials. Because Mignonette is only slightly larger than Tom Thumb, it is ideal for baby vegetable enthusiasts. Peter Henderson is credited with naming it and marketing it to several seed houses including Maule's around 1898. A=2g, 50¢, B=4g, $1.00, C=14g, $1.50, D=28g, $3.00, E=112g, $5.00, K=448g, $10.00.

2754 Prizehead (48 days) Crinkly outer leaves tinged with red. Superior flavor. Very popular market type. Bolts in heat. Heirloom offered by Hirschy in 1890 for a nickel a packet. A=2g, 50¢, B=4g, $1.00, C=14g, $1.50, D=28g, $3.00, E=112g, $5.00, K=448g, $10.00.

2764 Red Sails (49 days) Petoseed's 1985 All-America winner has become almost synonymous with red leaf lettuce. Red Sails is delicious, slow to become bitter or to bolt even in heat, and a most attractive large plant with purplish-red-splashed leaves. New Hampshire market grower Rick Estes says, "Nothing (among reds) comes close to Red Sails for dependability and consistent harvesting for a wholesale market. Heat, cold, drought, wet—it makes no difference. Red Sails comes shining through." Supplanted Buttercrunch as our best-selling lettuce in 1997. The 1,677 packets we sold in 1998 were the most for any lettuce since 1992. A=2g, 50¢, B=4g, $1.00, C=14g, $1.50, D=28g, $3.00, E=112g, $7.00, K=448g, $20.00.

2768 Waldmann's (50 days) Large handsome crinkly-leaved heads of bright green lettuce. An attractive green leaf Grand Rapids-type for market. Superior appearance and texture to Green Ice, but not as heat tolerant. Gets bitter toward mid-July. A=2g, 50¢, B=4g, $1.00, C=14g, $1.50, D=28g, $3.00, E=112g, $5.00, K=448g, $10.00.

2772 Buttercrunch Bibb (50 days) A 1963 All-America selection. Dark-green outer leaves with creamy center heart. Slow to bolt. Our best-selling lettuce for fifteen consecutive years from 1982-96 until finally overtaken by Red Sails. A=2g, 50¢, B=4g, $1.00, C=14g, $1.50, D=28g, $3.00, E=112g, $5.00, K=448g, $10.00.

2776 Winter Marvel Butterhead (52 days) A large fancy light green butterhead recommended for fall production and overwintering where the climate permits. Grows rapidly, but bolts readily in summer heat. If you are sowing in spring for an early summer butterhead, be aware that the harvesting window is very narrow. NEW! A=2g, 50¢, B=4g, $1.00, C=14g, $1.50, D=28g, $3.00, E=112g, $5.00, K=448g, $10.00.

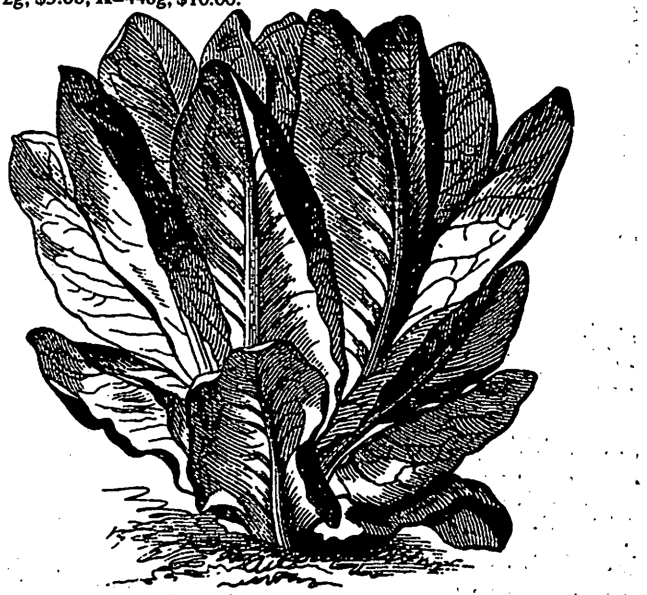
2778 Slobolt (53 days) Two commercial growers who attended the talk on lettuce varieties at MOFGA's 1997 Farmer to Farmer Conference took me to task for dropping Slobolt. Slow growth in its early stages is the key to Slobolt's success as a summer lettuce. A Grand Rapids type with much paler green leaves than Waldmann's, Slobolt will hold well into July without bolting. Slobolt is versatile: One grower in New York reported good results growing it in winter under lights as well as in summer tightly spaced in the garden. A=2g, 50¢, B=4g, $1.00, C=14g, $1.50, D=28g, $3.00, E=112g, $7.00, K=448g, $20.00.

2780 Batavia Blonde #6 (55 days) This Danish variety is unusually lovely with its fringed blonde leaves. Better yet, it holds a long time, doesn't get bitter, and tastes good. A=2g, 50¢, B=4g, $1.00, C=14g, $1.50, D=28g, $3.00, E=112g, $6.00, K=448g, $18.00.

2786 Kagraner Sommer Bibb (58 days) Makes elegant pale-green heads of exceptional quality. Its real claim to fame is its reluctance to bolt even in midsummer heat. A=2g, 50¢, B=4g, $1.00, C=14g, $1.50, D=28g, $3.00, E=112g, $5.00, K=448g, $10.00.

2788 Esmeralda Bibb (60 days) Fancy butterhead lettuce at its best! The most elegant heart of any butterhead we've grown. Compared to Nancy, which it replaced, Esmeralda is slower-growing, longer-holding, with an even more buttery texture. Makes firm heads with large frames and butts and creamy yummy lime-green hearts. Always a topnotch performer in our trials, its fancy quality put all the other butterheads to shame in 1998. Destined to become a top seller as soon as more people discover it. Tolerant to DM1, 2A, 2B, 3, 4 and LMV. A=2g, 50¢, B=4g, $1.00, C=14g, $1.50, D=28g, $3.00, E=112g, $6.00, K=448g, $18.00.

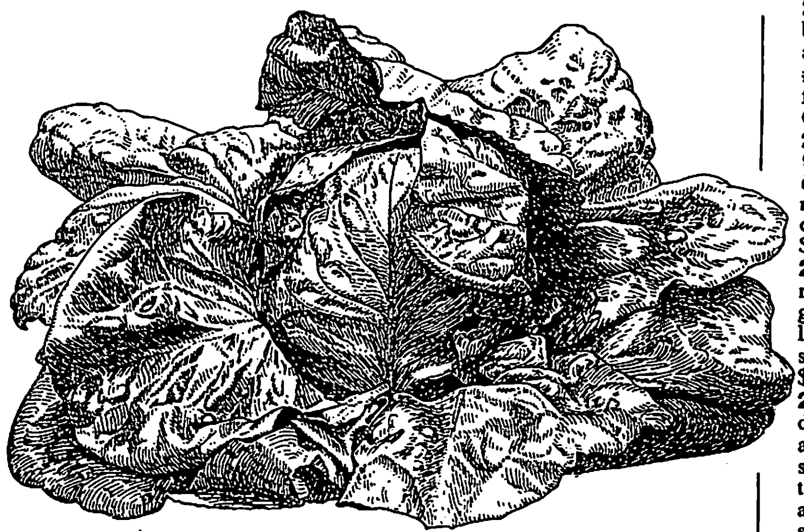
2791 Winter Density Bibb/Romaine (60 days) Is it a bibb lettuce or a romaine? Doesn't matter, either way it's one of Gene's favorites, as the eating quality of the thick tender dark green leaves is superb. Starts out looking like a bibb. Wrapper leaves fold tightly, form a head like a romaine when mature. Combines the substance of romaine with the tender succulence of bibb. A=2g, 50¢, B=4g, $1.00, C=14g, $1.50, D=28g, $3.00, E=112g, $5.00, K=448g, $10.00.



2794 Rouge d'Hiver Romaine (65 days) The lettuce we've been selling in recent years as Rouge d'Hiver is really Brune d'Hiver. (see **#2962** for details). This year we are carrying both. This is true Rouge d'Hiver, black-seeded, with much deeper red outer leaf coloration than the merely tinged Brune. Inner leaves are green with deeply bronzed tip, an attractive color combination which commands attention, Forms a semi-open Romaine head with excellent flavor, especially in cold weather. Develops pronounced bitterness in summer heat. *Hiver* means "winter" and both Brune and Rouge are more suitable for fall production or overwintering than for summer. French heirloom from the 1840s. A=2g, 50¢, B=4g, $1.00, C=14g, $1.50, D=28g, $3.00, E=112g, $6.00, K=448g, $18.00.

2796 Parris Island Cos Romaine (68 days) The standard market romaine. Upright heads 8-9" tall self-fold to form compact head. Interior greenish-white. Resistant to tipburn and bolting even in heat. Irrigation improves its texture. Cos is an island in the Dodecanese region of Greece where this type lettuce may have originated. First sold in this country by Bernard M'Mahon of Philadelphia in 1802. A=2g, 50¢, B=4g, $1.00, C=14g, $1.50, D=28g, $3.00, E=112g, $5.00, K=448g, $10.00.

2798 Webb's Wonderful (72 days) Comes to us from England via M. Schultz' lettuce collection. Exceptional buttery mild flavor is reminiscent of the butterheads. Instead Webb's remarkable large-veined lightly savoyed dark-green leaves slowly form a very large crisphead. Stands heat well and bolts reluctantly. A delicious grazing lettuce with never even a hint of bitterness. I start harvesting leaves long before heads form. A=2g, 50¢, B=4g, $1.00, C=14g, $1.50, D=28g, $3.00, E=112g, $5.00, K=448g, $10.00.



LETTUCE CONTINUE

The varieties in this section average 850 seeds per pkt.

2806 Green Ice (45 days) Customers asked us to list Burpee's well-known variety. This shiny crinkly looseleaf with fringed leaf margins is firm and crunchy in salads. Slow to bolt, but gets tough in the centers. A=1g, 80¢, B=2g, $1.50, C=4g, $2.50, D=14g, $6.00, E=28g, $10.00, K=112g, $30.00.

2810 Brunia Oakleaf (46 days) Vilmorin's bronze oakleaf type closely resembles Cocarde. Its rusty and green colors, combined with its perfect form, make it one of the most striking in the lettuce patch. More home gardeners should try this longtime commercial favorite. A=1g, 80¢, B=2g, $1.50, C=4g, $2.50, D=14g, $8.00, E=28g, $14.00, K=112g, $55.00.

2816 Cracoviensis (47 days) Of all the lettuces M. Schultz (see p. 30) shared with me, Cracoviensis proved to be my absolute favorite, unlike any others in size, shape or colors. Cracoviensis is where the red meets the green, making a dazzling twisting rosette with heavy purple accenting, especially towards the center. Plants are fast growing and very large. Although relatively rapid bolters, their tender buttery flavor without bitterness persists even after they bolt. May be worth a try for overwintering in warmer areas—one customer living in New Jersey near the ocean reported success. Though it is listed as a specific type of lettuce in The Vegetable Garden by Vilmorin-Andrieux (1885), we have never seen Cracoviensis offered by any other seed company. Seed grown without herbicides, pesticides or chemical fertilizers. A=1g, 80¢, B=2g, $1.50, C=4g, $2.50, D=14g, $6.00, E=28g, $10.00, K=112g, $30.00.

2824 Simpson Elite (48 days) Despite its name, similar size and light green color, Simpson Elite is a succession variety rather than a replacement for Black Seeded Simpson. Elite doesn't germinate as well in cold soil, or grow as quickly as BSS, but way surpasses the heirloom in its ability to stand heat without bolting. With Elite, you can extend the season by at least 2-3 weeks. A=1g, 80¢, B=2g, $1.50, C=4g, $2.50, D=14g, $3.00, E=28g, $5.00, K=112g, $10.00.

2826 Antares Oakleaf (48 days) A shimmery pink and bronze oakleaf growing vigorously to magnificent size. The extra-frilled finely cut bright leaves are colorful and tender, not bitter even in early July. Antares, especially when started indoors, transplanted early in spring, and allowed ample space, puts on a terrific show. Another dazzling creation by Frank Morton. NEW! A=1g, 80¢, B=2g, $1.50, C=4g, $2.50, D=14g, $8.00, E=28g, $14.00, K=112g, $50.00.

2829 Green Deer Tongue (48 days) Also known as Matchless, this venerable heirloom goes all the way back to the 1740s. One of the only two deer tongues you will ever want to see in your garden! Companion to Red Deer Tongue with its characteristic thick green pointed leaves radiating from a compact center. Slow to bolt. Has a rich nutty flavor that doesn't turn bitter. OCIA-certified organically grown seed. A=1g, 80¢, B=2g, $1.50, C=4g, $2.50, D=14g, $6.00, E=28g, $10.00, K=112g, $30.00.

2830 Red Deer Tongue (48 days) Heirloom Red Deer Tongue, a longtime favorite in our trials, prominently features thick-textured pointy leaves radiating from compact centers. Bright green leaves with red edges are imbued with a rich nutty flavor that you will want to enjoy again and again. Withstands heat fairly well. Organically grown seed. *Order early; seed in short supply.* A=1g, 80¢, B=2g, $1.50, C=4g, $2.50, D=14g, $8.00. *Not available in larger sizes.*

2834 Blushed Butter Oaks (49 days) This Fedco introduction in 1997 elicited immediate customer interest. One of a new class of lettuces developed by Frank Morton in Oregon and grown without chemical fertilizers, pesticides or herbicides. Best described as a compact oakleaf butterhead, with a delightful combination of pink and green colors and a buttery taste, Blushed Butter Oaks was a hit with everyone who saw it or sampled it at our trial. Has some frost tolerance. A=1g, 80¢, B=2g, $1.50, C=4g, $2.50, D=14g, $8.00, E=28g, $14.00, K=112g, $50.00.

2836 Blushed Butter Cos (49 days) Here is a combination butterhead/romaine lettuce with ruffled savoyed leaves dappled in an attractive palette of reds and greens. Best of all, Butter Cos was judged to be #1 for taste out of more than 100 lettuces in our 1996 trial. Remarkably crisp for such a buttery taste. A Fedco introduction. A=1g, 80¢, B=2g, $1.50, C=4g, $2.50, D=14g, $8.00, E=28g, $14.00, K=112g, $50.00.

2852 Sierra Batavian (50 days) A red-tinged French Batavian renowned for its extraordinary seedling vigor, resistance to tipburn and reluctance to bolt even in midsummer heat. Has compact upright form. A favorite among market growers, it especially stands out in late July when others have rotted or bolted. Resists DM, tolerates LMV. A=1g, 80¢, B=2g, $1.50, C=4g, $2.50, D=14g, $8.00, E=28g, $14.00, K=112g, $55.00.

2856 Royal Oakleaf (50 days) The most attractive green oakleaf, recommended for market growers. Darker, larger and fancier than other green oakleaf types. Our supplier calls it the "Rolls Royce of oakleaf lettuces." We agree. We sold out early last year, but expect to have a full supply, with the price returning to normal. A=1g, 80¢, B=2g, $1.50, C=4g, $2.50, D=14g, $6.00, E=28g, $10.00, K=112g, $30.00.

2860 Hyper Red Rumple Waved (50 days) If you are drawn to really deep red lettuces, Hyper is the one. Selecting from a cross between Valeria, a very red cold tolerant Lollo Rossa type, and Wavy Red Cos, an undulating savoyed red romaine, Frank Morton bred Hyper to accentuate the pigmentation and the ruffled appearance. The result is not only truly stunning, but also tastes good with a pleasing texture. Holds for a while in July before succumbing to heat. Should have good cold tolerance. NEW! A=1g, 80¢, B=2g, $1.50, C=4g, $2.50, D=14g, $8.00, E=28g, $14.00, K=112g, $50.00.

2876 New Red Fire (51 days) Offered as a substitute for Red Sails in 1992, Fire gained a well-deserved popularity with commercial growers. Has Sails' characteristic ruffled leaves, similar though slightly lighter coloration, and good size. Best of all, it has been absolutely the last to bolt in our lettuce patch, lasting as late as July 29! Seed from Japan. A=1g, 80¢, B=2g, $1.50, C=4g, $2.50, D=14g, $8.00, E=28g, $14.00, K=112g, $50.00.

2884 Rossimo (52 days) Even in a trial with 110 types of lettuce in variegated colors, Rossimo's brilliant rich cherry-red crinkly-leaved open head really stood out! Grows slowly but tolerates heat fairly well. Rossimo is Royal Red's look-alike twin, spellbinding with its terrific bright red color in late June and early July. *Seed in short supply, order early.* A=1g, 80¢, B=2g, $1.50, C=4g, $2.50. *Not available in larger sizes.*

2890 Monet (53 days) Shortly after arriving in Giverney, the famed French impressionist Claude Monet (1840-1926) had his gardeners replace the hedges, which he found boring, with flower gardens. I wonder how he would have depicted our lettuce trials after I allowed volunteer red amaranth, sweet annie and carnation poppies to intersperse with the lettuces. His namesake in the lettuce patch looks more like a frisée endive than a lettuce, but that's not surprising because Petoseed bred Monet's deeply indented curly green crisp textured leaves to be cut for mesclun. Monet's close cousin Tango, while unknown in painting circles, is better known in the seed trade, but we prefer Monet's darker green color. Although plants grow 7-8", don't let the leaves go unsnipped too long because this Monet will bolt in heat. A=1g, 80¢, B=2g, $1.50, C=4g, $2.50, D=14g, $6.00, E=28g, $10.00, K=112g, $30.00.

2892 Red Riding Hood Butterhead (53 days) You'll keep the Big Bad Wolf away from the door if you grow this lovely butterhead with deeper red color and much better bolt resistance than Merveille des Quatre Saisons. Veined leaves; large, elegant heads. Close kin to Continuity. A=1g, 80¢, B=2g, $1.50, C=4g, $2.50, D=14g, $6.00, E=28g, $10.00, K=112g, $30.00.

2908 Pirat Butterhead (55 days) Elegant bronzed large butterhead always looks good in the trial. Has a delicious smooth taste, and holds well except in prolonged wet spells. Pirat descended from Merveille des Quatres Saisons but is much more bolt resistant. Seed organically grown. A=1g, 80¢, B=2g, $1.50, C=4g, $2.50, D=14g, $6.00, E=28g, $10.00, K=112g, $30.00.

2912 Speckled Bibb (55 days) An ornamental lettuce of spectacular beauty, its apple-green leaves are splashed with maroon flecks. Will be a stunner in your garden or your salad. Flavor is mild. Makes small firm heads shaped like Merveille des Quatres Saisons, centers with soft leaves blanching creamy yellow. Seed probably brought to Lancaster, PA, prior to 1850 by Mennonite immigrants and according to William Woys Weaver, introduced into commerce in 1880 as Golden Spotted. Frank Morton, who got the stock seed from the Seed Savers Exchange, has been selecting to alleviate tipburn. A=1g, 80¢, B=2g, $1.50, C=4g, $2.50, D=14g, $8.00, E=28g, $14.00, K=112g, $50.00.

Mary Schultz

The package arrived from across the continent six or seven years ago. Inside were samples in plain brown envelopes of over 100 varieties with names like Baba Lisa, Avondefiance, Cracoviensis (now **#2816** in our catalog), Grand Rapids Nacional, Shanghai 20, Salad Vietnam, Plukla, Yenshuo, Bronze Arrow and Grosse Blonde Parasseuse (Big Lazy Blonde)...names which bespoke the global heritage of her beloved lettuces.

As she has done for so many others over the past 25 years, Mary Schultz had shared her priceless gift with me. "These things have been around a long time," declares Schultz, "and they're not going to die on my watch." In any given year Schultz grows out 450-500 varieties for seed, "to watch them grow and see how they manage their lives." Her collection is so large that she is on a 4-5 year rotation.

How did an artist evolve into a market gardener, seed saver and co-curator of lettuce for the Seed Savers Exchange? "As seamlessly as night into day," she says. Her grandfather, a bank president in the Midwest, worked a one-acre garden, providing food and flowers for his big estate, because nothing in the grocery store was good enough for him. His granddaughter never forgot the flavor of his fruits and vegetables and keeps it indelible by preserving their heritage.

Drawn by her Russian lineage and her reading, Schultz visited the Vasilov Institute in Leningrad in 1974. While there she was able to envision the devastating Nazi blockade and the dedicated scientists who chose to starve rather than consume the seeds they were charged to preserve, and she was deeply affected.

Schultz, now 68, has survived a succession of illnesses, floods and natural disasters that would have overcome a less indomitable spirit. In one letter at the end of 1993 she confided, "I would have died if it were not for my garden. It is so lovely, you know."

Lovely, indeed. And how's this for precision, production and diversity? Schultz recently finished hand-digging her 1998 potato crop. In an area about 35x135' (about 5,000 sq ft) she harvested 2,863 lb. of potatoes from 154 different varieties. "They were perfect," she said.

In the 1997 Seed Savers Yearbook she listed 120 lettuces among her 135 offerings. Among her favorites are the photogenic Forellenschluss (**#2915**); Brasilianer, a great big cabbage-like head lettuce with frilly edges on the leaves; Ben Shemen, a big butterhead; and Sweetie, a lovely sweet oversized floppy romaine too soft and tender for shipping.

But Schultz shares more than seeds. When I reported problems germinating some of her seeds outdoors, she passed on her near foolproof transplanting method. For the last seven years, she has written a gardening column for the Monroe (WA) Monitor, recently making the front page for the first time with her exposé of the Terminator gene. She once described her purpose with some asperity as "trying to make a dent in the Dogpatch mentality here that sells vegetables at a roadside stand to have enough money to buy inferior produce at the supermarket."

Schultz never has to settle for inferior produce. Neither do we, thanks to her work.

2915 Forellenschluss Romaine (56 days) Also known as Freckles or Trout Back, an absolutely gorgeous Romaine with the delicate taste and texture of a butterhead. No wonder it is the Seed Savers Exchange's favorite lettuce of the more than 900 varieties in their collection! Deep green leaves flecked with wine-red splotches distinguish this Austrian heirloom. Compared with Speckled, more upright, cup-shaped, the splotches are larger and darker, the flavor more buttery and holds better in heat. Just about the best-tasting of the 50 lettuces in our 1999 trial. Tender leaves may be harvested at the 4-6" stage for mesclun or allowed to grow full size for maximum ornamental benefit. **NEW! A**=1g, 80¢, **B**=2g, $1.50, **C**=4g, $2.50, **D**=14g, $6.00, **E**=28g, $10.00, **K**=112g, $20.00.

2916 Sweet Valentine Butterhead (56 days) A lettuce fit for a sweetheart, Valentine combines magnificent beauty with a mild, sweet taste. Beginning as a large spreading bronzed butterhead with rounded veined leaves, Valentine evolves into a romaine shape. Was very slow to bolt even in our hot dry 1995 conditions. Valentine is one of my favorites. More people are discovering it but it still doesn't sell as much as it should. **A**=1g, 80¢, **B**=2g, $1.50, **C**=4g, $2.50, **D**=14g, $6.00, **E**=28g, $10.00, **K**=112g, $40.00.

2924 Reine des Glaces Batavian (57 days) Also known as Ice Queen. We have located an Italian source for this scrumptious Batavian, which, in keeping with its type, makes a soft "head." Green convoluted rosettes with intricately toothed leaves lend Reine its distinctive beauty. Stands heat fairly well. **A**=1g, 80¢, **B**=2g, $1.50, **C**=4g, $2.50, **D**=14g, $6.00, **E**=28g, $10.00, **K**=112g, $30.00.

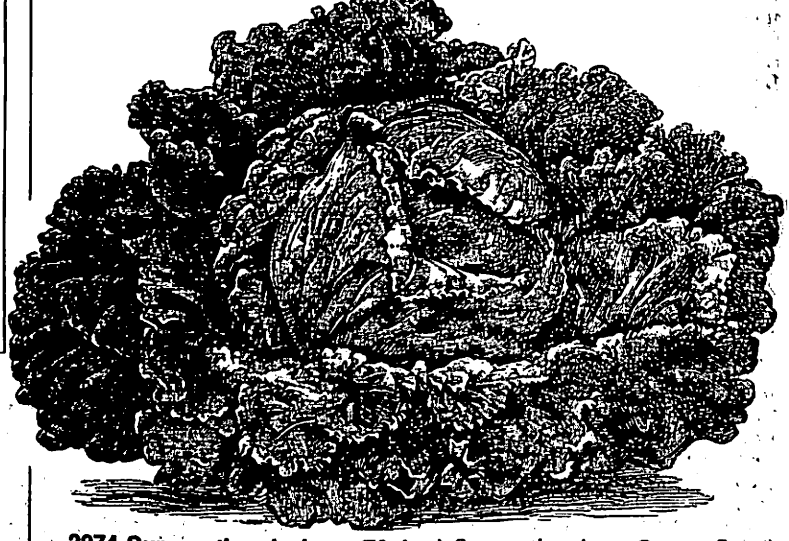
2938 Lollo Rossa Cutting (58 days) A unique type of lettuce generally harvested by snipping leaves instead of taking the whole plant. Frizzy foliage is light red on top, light green at base, making for a stunning contrast. Very cold hardy. Can be used to accent or garnish salads, or as an ornamental. Quite the rage in gourmet restaurants; a mainstay of our mesclun salads. We trialed four Lollos in 1994, and this Swiss strain was the best. Although not quite as colorful as several others, it had a milder, less bitter taste, and was much slower to bolt. **A**=1g, 80¢, **B**=2g, $1.50, **C**=4g, $2.50, **D**=14g, $6.00, **E**=28g, $10.00, **K**=112g, $30.00.

2948 Majestic Red Romaine (60 days) Its fancy savoyed rich bronze-red leaves make it positively gorgeous. Cylindrical "head" has somewhat spreading habit. One of the slowest-bolting romaines in our trial and much in demand in recent years. **A**=1g, 80¢, **B**=2g, $1.50, **C**=4g, $2.50, **D**=14g, $6.00, **E**=28g, $10.00, **K**=112g, $20.00.

2952 De Morges Braun (64 days) We owe our awareness of this unique lettuce to M. Schultz. Of the hundreds of lettuces we've grown, none other has the shimmery color of De Morges. As it matures, it grows upright like a romaine, its centers forming a green contrast to the pink outer leaves. Its texture and taste are as noteworthy as its color—smooth, buttery and not at all bitter. De Morges grows slowly and is one of the last to bolt. Rated "really special," the best of the 19 lettuces in the 1997 trial at Hidden Valley Farm. Trialer Polly Shyka called it the "bronze beauty." **A**=1g, 80¢, **B**=2g, $1.50, **C**=4g, $2.50, **D**=14g, $6.00, **E**=28g, $10.00, **K**=112g, $40.00.

2956 Plato II Romaine (65 days) A lettuce fit for a philosopher-king, Plato has all the elegance of the spreading open-habit romaine without any tendency to tipburn in heat. Plato sets the standard for sweet taste in romaine lettuce, holding its quality well into the summer without bitterness or bolting. Its dark green slightly ruffled heavily veined leaves are attractive in any plot. A real winner from Petoseed. **A**=1g, 80¢, **B**=2g, $1.50, **C**=4g, $2.50, **D**=14g, $6.00, **E**=28g, $10.00, **K**=112g, $20.00.

2962 Brune d'Hiver Romaine (65 days) At the Biodiversity Conference at Penn State last November, we were made more aware of the problem of misidentification of varieties. A few months later a letter from M. Schultz alerted us to one such mistake in our catalog. The lettuce we've been selling in recent years as Rouge d'Hiver is really Brune d'Hiver. Both are nineteenth century French heirlooms, but white-seeded Brune fits the description of our cultivar, broad flat pale green leaves tinged with bronze at the tips, somewhat redder in cold weather. Brune is one of the most striking plants in the garden and very delicious as an early crop. Keep moist to forestall bolting. Turns bitter in excess heat. Seed organically grown. **A**=1g, 80¢, **B**=2g, $1.50, **C**=4g, $2.50, **D**=14g, $6.00, **E**=28g, $10.00, **K**=112g, $30.00.



2974 Summertime Iceberg (70 days) Summertime is an Oregon State University release with uniform compact dense medium-sized heads of excellent flavor that are without peer in standing heat. Harvest iceberg well into July with Summertime. Resistant to tipburn. **A**=1g, 80¢, **B**=2g, $1.50, **C**=4g, $2.50, **D**=14g, $6.00, **E**=28g, $10.00, **K**=112g, $30.00.

2980 Lettuce Mix A mixture of lettuces with glorious contrasts of reds and greens and different leaf forms to create a beautiful patch. Components may vary, but all will be suitable for cut-and-come-again culture. **A**=1g, 80¢, **B**=2g, $1.50, **C**=4g, $2.50, **D**=14g, $6.00, **E**=28g, $10.00, **K**=112g, $30.00.

2986 Summer Lettuce Mix A special selection of red, green and bronze lettuce varieties that will stand into late July without bolting. **A**=1g, 80¢, **B**=2g, $1.50, **C**=4g, $2.50, **D**=14g, $8.00, **E**=28g, $14.00, **K**=112g, $50.00.

2992 Mesclun "Mesclun" is a term from Provence for their characteristic country salad mixtures. These mixes have captured the imaginations of stateside gardeners. Shep Ogden of Cook's Garden is credited for much of their popularity. In each of the past two seasons, we've sold more than 2,000 packets. Our mix consists of two packets: the lettuce mix described in **#2980**, and a mixture of mizuna, chervil, endives, sorrel, Red Giant mustard, arugula, and tatsoi. We may substitute one or two other varieties if necessary. Harvest these greens by cutting them with scissors. They will grow back, though you will need to water them in dry conditions. We recommend that you plant each packet in adjoining beds or rows so that the lettuces won't overwhelm the other greens. You can enhance your mesclun by adding other greens such as mâche, claytonia, and bronze fennel. Add edible flowers of garlic chives, nasturtiums, gem marigolds, borage, and mustard blossoms to lend further appeal to the mix by creating delectable color and taste contrasts. **A**=1g, 80¢, **B**=2g, $1.50, **C**=4g, $2.50, **D**=14g, $6.00, **E**=28g, $10.00, **K**=112g, $30.00.

Open-Pollinated GREENS

3008 Hopi Red Dye Amaranth (46 days) *Amaranthus cruentus Regret seed not available in 1999.*

3012 Tricolor Amaranth (50 days) *A. tricolor* Could easily be listed with everlastings for the tall purplish-red seed spires which it sends up late in the summer. Earlier in the year its young green leaves overlaid with burgundy add zesty colors to salads. Flavor is somewhat like pigweed. Seed grown without pesticides, herbicides or chemical fertilizers. **A**=1/16oz, 50¢, **B**=1/8oz, $1.00, **C**=1/2oz, $3.00, **D**=1 oz, 6.00, **E**=4oz, $20.00, *not available in size K.*

3022 Arugula (47 days) *Eruca sativa* Also known as Roquette or Rocket. Musky green will spice up your salad. Much better when grown for fall crop, as will bolt readily in heat. A prime ingredient in tangy mesclun mixes. Few people are indifferent to arugula: Most of us love it, a few find it inedible. Almost unknown 10 years ago, it is now so popular that we order 50-pound bags of seed! A favorite of commercial growers who bought 122 E sizes packets last year plus 122 lb. in bulk. **A**=1/16oz, 50¢, ~820 seeds, **B**=1/8oz, $1.00, **C**=1/2oz, $1.50, **D**=1oz, 3.00, **E**=4oz, $5.00, **K**=1lb, $12.00.

CHARD *Beta vulgaris* (cicla group)

1/16 oz packet sows 12 ft, 1 oz plants 200 ft. Hardy.

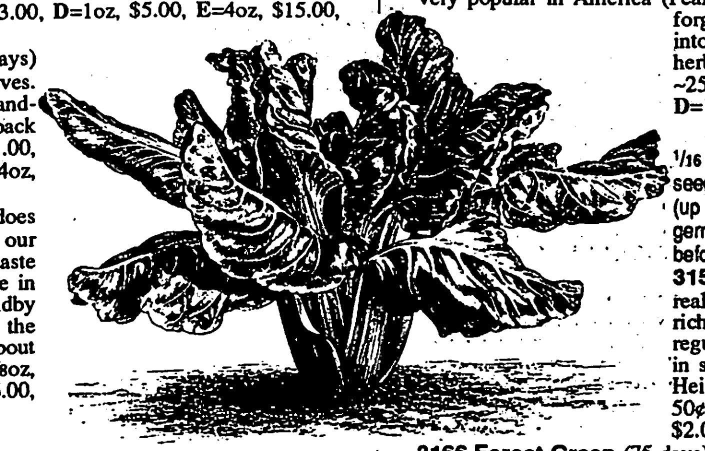
3032 Fordhook Giant Swiss Chard (50 days) Broad white stems, leaves dark green and savoyed with white veins. The standard variety, introduced by Burpee in 1924. Strains of green swiss chard have been around since 1750. Very hardy. **A**=1/16oz, 50¢, **B**=1/8oz, $1.00, **C**=1/2oz, $1.50, **D**=1oz, $2.00, **E**=4oz, $4.00, **K**=1lb, $8.00.

3034 Perpetual Spinach or Leaf Beet (55 days) Thanks to Pam Dawling of Twin Oaks Community Garden (VA) who suggested we add this member of the chard family. Leaf beet looks similar to garden variety swiss chards, but its stems are thinner, and its exceptionally tender leaves are smoother, not puckered. It tastes unlike any other chard, imparting a spinach-like flavor which lingers pleasantly. Unlike spinach, Perpetual lasts through summer into fall as it withstands light and moderate frosts. Pam calls it a "must-grow." **A**=1/16oz, 50¢, **B**=1/8oz, $1.00, **C**=1/2oz, $1.50, **D**=1oz, $3.00, **E**=4oz, $5.00, **K**=1lb, $10.00.

3036 Bright Lights (56 days) Johnny's Selected Seeds won its second All-America award for making swiss chard commercially available in a rainbow of colors. Bright Lights bathes stems, midribs and secondary veins in a panoply of gold, yellow, orange, pink, intermediate pastels and dazzling stripes. The AAS judges were impressed by the tenderness of its dark-green to bronze leaves and the mildness of its chard flavor. Young seedlings respond to cut-and-come-again culture, ideal for mesclun. Bright Lights was developed by John Eaton of Lower Hutt, New Zealand, who found the parent plants, a red one and a yellow one, in a small home garden in 1977 and crossed them to standard green and white varieties, selecting for color and flavor over the next fifteen years. Johnny's worked the following years to preserve the strength and range of the individual colors. **A**=1/16oz, 50¢, ~55 seeds, **B**=1/8oz, $1.00, **C**=1/2oz, $3.00, **D**=1oz, $5.00, **E**=4oz, $15.00, **K**=1lb, $50.00.

3040 Ruby Red Rhubarb (59 days) Deep crimson stalks, dark-green leaves. Very hardy. Beautiful for edible landscapes. Heirloom from Europe goes back to 1857. **A**=1/16oz, 50¢, **B**=1/8oz, $1.00, **C**=1/2oz, $1.50, **D**=1oz, $3.00, **E**=4oz, $5.00, **K**=1lb, $14.00.

3042 Charlotte (59 days) All chard does not taste the same. We've found in our trials that different colored stalks taste noticeably different. Charlotte is a case in point. Slightly redder than old standby Ruby, it is also much sweeter. Worth the extra seed cost if you are particular about chard. **NEW! A**=1/16oz, 50¢, **B**=1/8oz, $1.00, **C**=1/2oz, $4.00, **D**=1oz, $6.00, **E**=4oz, $20.00, **K**=1lb, $55.00.



CRESS *Lepidium sativum*

3050 Curly Cress (20 days) Bright green tightly ruffled leaves can be cut as soon as they are a couple of inches tall. Peppery flavor enlivens salads. Offered by C.P. Hirschy for a nickel a packet in 1890. **A**=1/16oz, 50¢, ~570 seeds, **B**=1/8oz, $1.00, **C**=1/2oz, $1.50, **D**=1oz, $2.00, **E**=4oz, $4.00, **K**=1lb, $8.00.

See also watercress, #4694.

ENDIVE *Cichorium endivia*

1/16 oz packet sows 40 ft, 1 oz 650 ft.

3062 Très Fine Maraichere (42 days) Large frizzy endive with very fine ribs suitable for late spring and early summer harvests. Known to chefs as frisée. **A**=1/16oz, 50¢, ~1225 seeds, **B**=1/8oz, $1.00, **C**=1/2oz, $2.50, **D**=1oz, $4.00, **E**=4oz, $14.00, **K**=1lb, $55.00.

3084 Lorca (52 days) The curliest and most spread-out of the endives in our trial. Unlike TFM, the leaves are curly, not frizzy. Makes a beautiful plant with large, deep, thick heads which hold a long time. **A**=1/16oz, $1.00. *Not available in larger sizes.*

3092 Broad-Leaved Batavian (85 days) Also known as Escarole. Smooth dark-green broad outer leaves with creamy yellow closely bunched center leaves described as thick and fleshy by Fearing Burr in Field and Garden Vegetables (1863). **A**=1/16oz, 50¢, ~1140 seeds, **B**=1/8oz, $1.00, **C**=1/2oz, $1.50, **D**=1oz, $3.00, **E**=4oz, $5.00, **K**=1lb, $8.00.

MÂCHE *Valerianella locusta*

Also known as Corn Salad, Lamb's Lettuce, Field Salad and Fetticus, mâche has a unique nutty flavor that really enhances salads. Harvest by pinching off the entire rosette at ground level. The once-humble peasant green is highly touted by Eliot Coleman, and has now gained favor in higher social strata. We added a second mâche in 1994 because of the growing interest in cold-tolerant vegetables for year-round gardening stimulated by Coleman's Four-Season Harvest.

3102 Verte de Cambrai (45 days) A small-seeded small-leaved strain which performs especially well in cool or cold conditions and is the best variety for overwintering. May be the same variety as grown by Thomas Jefferson in Monticello in 1810 under the name 'Candia.' **A**=1/16oz, 50¢, **B**=1/8oz, $1.00, **C**=1/2oz, $1.50, **D**=1oz, $3.00, **E**=4oz, $7.00, **K**=1lb, $25.00.

3114 Large-Leaf Round (60 days) Vigorous-growing large-leaf strain which is suitable for sowing in spring for an early summer harvest. Weaver traces this strain back to the 1840s, but for centuries prior to that corn salad was gathered in the wild. **A**=1/16oz, 50¢, **B**=1/8oz, $1.00, **C**=1/2oz, $1.50, **D**=1oz, $3.00, **E**=4oz, $7.00, **K**=1lb, $25.00. 10,000 seeds/oz.

MUSTARD GREENS

3138 Green Wave (45 days) *Brassica juncea* Bright green color. Hot mustardy flavor; prime ingredient in spicy mesclun. Not as hot when parboiled. Will come back when cut; slow to bolt. 1957 AAS winner. **A**=1/16oz, 50¢, ~1060 seeds, **B**=1/8oz, $1.00, **C**=1/2oz, $1.50, **D**=1oz, $2.00, **E**=4oz, $4.00, **K**=1lb, $8.00.

RED ORACH

3148 Red Orach (38 days) *Atriplex hortensis* Key salad ingredient also known as Mountain Spinach, this beautiful red-purple plant thrives in cool weather and should be sown as soon as the ground can be worked. Its spinach-shaped leaves have a mild flavor, and can be pinched back to encourage production and retard bolting. Produces an abundance of seed which can be saved, and will occasionally self sow in your garden. Once very popular in America (Fearing Burr listed 16 varieties in 1865!), then forgotten for many years, Orach has come back into favor. Seed grown without pesticides, herbicides or chemical fertilizers. **A**=1/16oz, 50¢, ~250 seeds, **B**=1/8oz, $1.00, **C**=1/2oz, $3.00, **D**=1oz, $6.00, **E**=4oz, $24.00, **K**=1lb, $90.00.

PARSLEY *Petroselinum crispum*

1/16 oz packet sows 25 ft, 1 oz 400 ft. 14,000 seed/oz average. Very hardy. Very slow to germinate (up to 30 days). Soaking seed 8-12 hours will hasten germination. Parsley seed is short-lived; test old seed before sowing.

3158 Gigante d'Italia (70 days) We were really wowed by its early seedling vigor and rich sweet flavor in our 1992 trial. Although the regular Plain Leaf eventually almost caught up in size (1') it never matched Gigante in flavor. Heirloom hails from northern Italy. **A**=1/16oz, 50¢, **B**=1/8oz, $1.00, **C**=1/2oz, $1.50, **D**=1oz, $2.00, **E**=4oz, $4.00, **K**=1lb, $8.00.

3166 Forest Green (75 days) Combination double- and triple-curled with long, upright stems. Holds color well all season. **A**=1/16oz, 50¢, **B**=1/8oz. $1.00, **C**=1/2oz, $1.50, **D**=1oz, $3.00, **E**=4oz, $5.00, **K**=1lb, $8.00.

3174 Plain Leaf (80 days) Flat glossy dark-green leaves with strong flavor. **A**=1/16oz, 50¢, **B**=1/8oz, $1.00, **C**=1/2oz, $1.50, **D**=1oz, $2.00, **E**=4oz, $3.00, **K**=1lb, $8.00.

SORREL

3192 Broad-Leaved Sorrel (60 days) *Rumex acetosa* Perennial often known as Sour Grass likes cool weather, acid soil, and plenty of water. Lemony flavored sword-shaped leaves add tang to soups and salads. To maintain steady supply of tender leaves, keep cutting and never let seed stalks mature. Makes a tasty spring tonic in salads. **A**=1/16oz, 50¢, ~1925 seeds, **B**=1/8oz, $1.00, **C**=1/2oz, $1.50, **D**=1oz, $3.00, **E**=4oz, $7.00, **K**=1lb, $20.00.

ORIENTAL GREENS

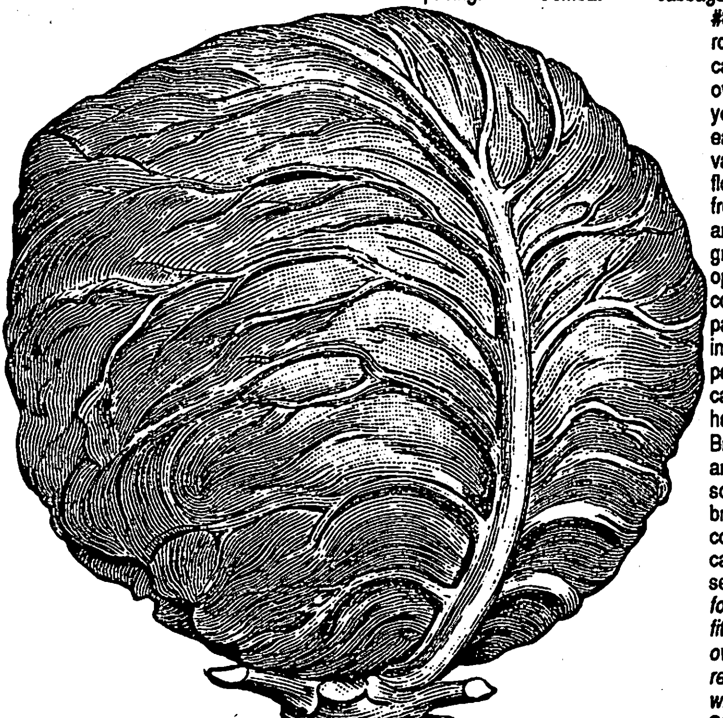
We do considerable trials work with these greens in search of new opportunities to broaden our palates. See also **#6858-6860**.

3208 Maruba Santoh (35 days) *Brassica rapa* (pekinensis group) Open-pollinated. With Maruba you get two vegetables in one: a mild piquant flavor similar to mustard in the loose round light green leaves and a juicy crisp pac choi taste in the flat white stem. Fairly bolt tolerant, so plant after the early spring flea beetle invasion subsides. A=1/16oz, $1.00, ~640 seeds, B=1/8oz, $1.80, C=1/2oz, $3.00, D=1oz, $4.00, E=4oz, $12.00, K=1lb, $40.00.

MUSTARDS

1/16 oz packet sows 40 ft, approx 15,600 seeds per oz.

3228 Mizuna (40 days) *B. r.* (japonica group) Open-pollinated. Vigorous heirloom Japanese mustard produces slender white stalks with deeply cut and fringed dark green leaves. Not pungent. One planting could suffice for full season production if you watered it in dry spells and kept it cut. Three or more successions would be required for the more discriminating connoisseur because the young leaves are more tender. In our 1995 trial, this strain was considerably more bolt-resistant than Kyona. Biennial. Essential in mild mesclun. A=1/16oz, $1.00, B=1/8oz, $1.80, C=1/2oz, $3.00, D=1oz, $4.00, E=4oz, $12.00, K=1lb, $30.00.



3234 Tokyo Beau (45 days) F-1 hybrid. *B. r.* (japonica group) A hybrid version of Mizuna with bigger, broader leaves; thicker, wider and whiter stems; and more vigor. Milder and sweeter flavor than Toraziroh. A dual purpose vegetable: The leaves can be cut like Mizuna's; the stem can be enjoyed like pac-choi or chinese cabbage. Both leaves and stems are excellent stir-fried or braised. Although Beau stood all summer with only scattered bolting, it is particularly cold tolerant as well. A=1/16oz, $1.00, B=1/8oz, $1.80, C=1/2oz, $3.00. *Not available in larger sizes*

3236 Red Giant (45 days) *B. juncea* (integlifolia group) Open-pollinated. Large purple-tinted savoyed leaves make the 18" plants very decorative. Gene compares their taste to horseradish. I prefer to call it "peppery." It is less hot during cool weather. This heirloom Japanese mustard is a standard ingredient in spicy mesclun. A=1/16oz, $1.00, B=1/8oz, $1.80, C=1/2oz, $3.00, D=1oz, $4.00, E=4oz, $12.00, K=1lb, $30.00.

3244 Tatsoi (45 days) *B. r.* (narinosa group) Open-pollinated. Also known as Tah Tsai. Spoon-shaped thick dark-green leaves make beautiful compact rosettes with mild brassica flavor. Good stir-fried. Will come back when cut. Since our purchaser Nikos Kavanya first brought it to our attention, it has become an essential ingredient in our salads and mesclun. A=1/16oz, $1.00, B=1/8oz, $1.80, C=1/2oz, $3.00, D=1oz, $4.00, E=4oz, $12.00, K=1lb, $25.00.

3252 Toraziroh (45 days) *B. alboglabra* Open-pollinated. Here's a robust performer with just the right kind of mustardy bite. It rapidly develops prolific yields of large very dark green leaves distinctively but not overwhelmingly pungent. In two years of trials won many favorable reviews from brassica lovers. Stems, also edible, have a flavor somewhat like pac choi. Relatively slow to bolt. *Order early; seed in short supply.* A=1/16oz, $1.00, B=1/8oz, $1.80, C=1/2oz, $3.00. *Not available in larger sizes.*

PAC CHOI *B. r.* (chinensis group)

1/16 oz packet sows 30 ft, approx 12,500 seeds per oz. Pac choi and carrots are among the best sources of beta carotene.

3260 Mei Qing (45 days) F-1 hybrid. Baby pac choi with green stems likes cool temperatures. Bolt resistant. Vase-shaped plants have broad green petioles with beautiful dark leaves. A=1/16oz, $1.00, B=1/8oz, $1.80, C=1/2oz, $6.00, D=1oz, $10.00, E=4oz, $36.00, K=1lb, $120.00.

3270 Prize Choy (50 days) Open-pollinated. Classy pac choi with celery-like white stems and vase-shaped 15-18" tall heads. Seed organically grown. A=1/16oz, $1.00, B=1/8oz, $1.80, C=1/2oz, $4.00, D=1oz, $7.00, E=4oz, $25.00, K=1lb, $90.00.

CHINESE CABBAGE *B. r.* (pekinensis group)

1/16 oz packet sows 25 ft, approx 9,500 seeds per oz.

3276 Blues (52 days) F-1 hybrid. Better bolt resistance, disease resistance and taste than Nagoda 50. Flavor is relatively pungent. Suitable for planting early spring through July. You won't have to pay many dues to enjoy these Blues! Moderate tolerance to virus, DM, ALTS, BSR. A=1/16oz, $1.00, B=1/8oz, $1.80, C=1/2oz, $6.00, D=1oz, $12.00, E=4oz, $40.00, K=1lb, $120.00.

CHRYSANTHEMUM *C. coronarium*

3292 Garland Serrated (40 days) Open-pollinated. Grown for its aromatic greens with an unusual taste appreciated by devotees. Compared to other Shungiku varieties in our trial, this strain was superior: Its 5" flowers (buttercup yellow, edged in white with serrated tips) were larger and better for the edible flower market and its small grey-green serrated leaves had distinctly more chrysanthemum taste. The Japanese use it in hearty one-pot winter stews known as *oden.* Also good in salads, soups, and stir-fries. Plant thickly in early spring (or summer for a fall crop) and harvest green leaves when stems are 4-8 inches tall, before buds appear. A=1/16oz, $1.00, ~890 seeds, B=1/8oz, $1.80, C=1/2oz, $3.00, D=1oz, $4.00, E=4oz, $12.00, K=1lb, $30.00.

OPEN-POLLINATED BRASSICA

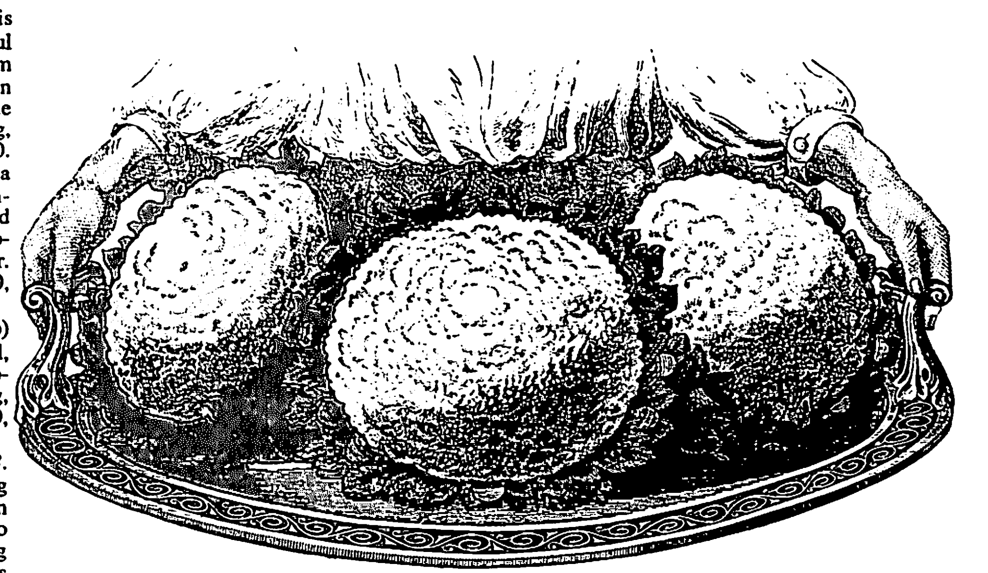
2 gram packet sows 45 ft. About 8,000 seeds per oz. Hardy. May be started indoors Mar.-Apr. for setting out in May, or direct-seeded in May or June for fall crop. For better stands in dry conditions sow in trenches. Kale and collards should be direct-seeded in July for Sept. maturity. Require warm temperatures to germinate. Need 60s during seedling stage for optimal growth; higher temperatures make seedlings leggy. Heavy feeders; for best growth, need regular moisture and 2-3' spacing. Combat cabbage loopers with Bt (see **#8901-7** in the supplies section). Use floating row covers to keep out flea beetles. When cauliflower heads first appear, bend leaves over curd to prevent discoloring. We welcome your suggestions for a good open-pollinated early cauliflower variety. Some brassica varieties perform poorly in hot summers. Cauliflower and broccoli are damaged by hard frosts, especially in spring. Brussels sprouts and kale are the hardiest members of the group. We have yet to find a satisfactory open-pollinated brussels sprout variety for our cold region. Please send suggestions. Over the past thirty years broccoli consumption has increased tenfold, but still only equals 3.3 lb. per capita per year. Broccoli contains significant levels of sulforaphane, a substance that helps detoxify carcinogens from the body. Broccoli is also exceptionally high in vitamins A and C, and along with collards and kale, a rich source of calcium. Research indicating that broccoli seed sprouts are more effective in combating cancer than the vegetable itself caused a run on open-pollinated broccoli seeds. *The broccoli seed which we offer is not food grade and we cannot guarantee that it is fit for human consumption. We have no control over the conditions in which it is stored before it reaches us. Please consult your health food wholesaler or retailer for sprouting seed .*

3310 Thompson Broccoli (92 days) *B. oleracea* (botrytis group) Oregon breeder Tim Peters, who has done much work with open-pollinated broccoli, rates Thompson as better than his earlier development Umpqua. When grown under fertile conditions, Thompson shows excellent resistance to stress and greater uniformity than Umpqua. Dark green heads average 5-6" in diameter, a few days later and without the occasional throwbacks which marred Umpqua. We are pleased to offer this excellent open-pollinated broccoli for fall crops. A=2g, 60¢, ~400 seeds, B=4g, $1.00, C=14g, $2.50, D=28g, $5.00, E=112g, $16.00. *No size K, order size E.*

3324 Early Jersey Wakefield Cabbage (63 days) *B. o.* (capitata group) This wonderful early cabbage originated in England in the early 1800s, was perfected by a German truck gardener in northern New Jersey and released by Peter Henderson in 1868. Wakefield's compact medium 2-3 lb. heads are distinctively pointy, if not intellectual. (Mark Twain said that a cauliflower is a cabbage with a college education, so I guess Wakefield did not matriculate.) Tender, flavorful waxy-looking Wakefield has stood the test of the ages and is still prized by home and market gardeners alike. A=2g, 60¢, ~620 seeds, B=4g, $1.00, C=14g, $1.50, D=28g, $2.50, E=112g, $4.00, K=448g, $10.00.

3334 Laso Red Cabbage (75 days) *B. o.* (capitata group) Slightly dwarfed variety with attractive round 2-3 lb. heads. Few wrapper leaves. A=2g, 60¢, ~1000 seeds, B=4g, $1.00, C=14g, $1.50, D=28g, $2.50, E=112g, $8.00, K=448g, $20.00.

3338 Danish Ballhead Cabbage (100 days) *B. o.* (capitata group) We've been looking for more open-pollinated brassicas. What better one than Danish Ballhead, which has been the standard storage cabbage since Burpee introduced it in 1887? Almost round 5-7 lb. blue-green heads grow well in cool climates. Will make marketable size by late summer, or hold till ready for storage in October. Very slow to split. Stores till late spring with a pleasing texture and flavor. Last offered by Fedco in 1991. **BACK!** A=2g, 60¢, ~1000 seeds, B=4g, $1.00, C=14g, $1.50, D=28g, $2.50, E=112g, $8.00, K=448g, $12.00.



3348 Dominant Cauliflower (94 days) *B. o.* (botrytis group) Where adaptable, Dominant produces a beautiful fall crop of elegant 4-6 lb. heads. It does not perform well in sandy soils under dry conditions, but is a star on highly fertile loams and clay soils. Suitable only for late crops. A=2g, 60¢, ~500 seeds, B=4g, $1.00, C=14g, $3.00, D=28g, $5.00, E=112g, $20.00, K=448g, $80.00.

3358 Champion Collards (60 days) *B. o.* (acephala group) Rich dark strain selected to stand longer. Resembles kale, but not savoyed. Thin to 12" apart for good size. Best as a fall crop. For greens into November; popular in the South for greens throughout the winter. A=2g, 60¢, ~665 seeds, B=4g, $1.00, C=14g, $1.50, D=28g, $2.50, E=112g, $4.00, K=448g, $7.00.

3372 Konserva Kale (60 days) *B. o.* (acephala group) Heavier yielding than Vates. Plants grow 2-2 1/2' tall, leaves curl in cold weather. Very nutritious and exceptionally cold hardy. A=2g, 60¢, ~665 seeds, B=4g, $1.00, C=14g, $1.50, D=28g, $2.50, E=112g, $8.00, K=448g, $12.00.

3382 Red Russian Kale organic seed (60 days) *B. napus* (pabularia group) Called Buda Kale by Fearing Burr in 1863 and Ragged Jack by Vilmorin-Andrieux in 1885. Russian traders brought this Siberian heirloom to Canada in the 19th century. It has undergone a rousing revival in the last ten years. Its oakleaf foliage colors after fall frosts. Red and purple leaves change to dark green when cooked. Use soon after picking; wilts quickly. Vigorous edible landscape plant has proven a big hit with customers for its unsurpassed tenderness and delicate flavor. Seed organically grown in Washington state. A=2g, 60¢, ~800 seeds, B=4g, $1.00, C=14g, $3.00, D=28g, $5.00, E=112g, $16.00, K=448g, $60.00.

3383 Red Russian Kale commercial seed (60 days) Same as above except commercially grown seed is more economical in the larger sizes. A=2g, 60¢, ~800 seeds, B=4g, $1.00, C=14g, $1.50, D=28g, $2.50, E=112g, $5.00, K=448g, $16.00.

3385 White Russian Kale (60 days) *B. n.* (pabularia group) A flat-leaf Siberian type, silvery green with white veining. Similar to Red Russian, but a few inches taller, a third more productive, with larger, more serrated leaves. Also, much hardier than Red Russian, will hold into November without protection and thrive in an unheated greenhouse, even if temperatures go down to 0°. Gene has harvested White Russian outdoors in Waterville out of the January snow. If season is extended, White Russian will produce new clusters of smaller tender secondary leaves from old axils. As with other Siberian Kales, flavor gets sweeter with frost. Seed grown without pesticides, herbicides or chemical fertilizer. A=2g, $1.20, ~490 seeds, B=4g, $2.00, C=14g, $6.00, D=28g, $12.00, E=112g, $36.00, K=448g, $140.00.

3387 Cavolo Palmizio or Nero di Tuscana (62 days) *B. o.* (acephala group) Also known as Dinosaur or Lacinato Kale. Described by Vilmorin-Andrieux in 1885. William Woys Weaver traced it back to the eighteenth century. Cavolo Palmizio seems elemental, a stripped-down version of kale shaped like a miniature palm tree about 18" high. Very dark-green wrinkled strap-like leaves appear almost black at a distance, looking minimalist compared with the more common lush curly leaved kales. Delicious and nutritious as well as adaptable to a wide temperature range, its sweet mild flavor improves after frost. We thank Faviana Olivier for acquainting us with this unique heirloom and providing us with the stock seed. A=2g, 60¢, B=4g, $1.00, C=14g, $3.00, D=28g, $5.00, E=112g, $20.00, K=448g, $70.00.

3390 Early White Vienna Kohlrabi (58 days) *B. o.* (gongylodes group) Early dwarf heirloom variety with short tops and medium-sized stems. Bulbs have crisp white tender flesh with a pungent taste. Don't like kohlrabi? Try harvesting it young when it tastes like a humble version of the globe artichoke. Its texture turns tough, woody, and inedible if you wait too long. From Central Europe before 1860. A=2g, 60¢, ~590 seeds, B=4g, $1.00, C=14g, $1.50, D=28g, $2.50, E=112g, $4.00, K=448g, $10.00.

3392 Gigante Kohlrabi (130 days) *B. o.* (gongylodes group) Tom Vigue and Eileen Fingerman introduced us to this Czechoslovakian heirloom, a staple of their root cellar. Unlike other kohlrabi, Gigante doesn't get woody even when it grows enormous. And it can grow quite large, regularly exceeding 10" in diameter and 10 lb. According to Nichols Garden Nursery, the world record is 62 lb., leaves included. Even in the spring, its crisp white mildly tangy flesh stays tender and never gets fibrous. Gigante will add zest to your meals while you await the first edible greens of spring. Sow in spring for late fall harvest. A=2g, 60¢, ~620 seeds, B=4g, $1.20, C=14g, $4.00, D=28g, $8.00, E=112g, $28.00, K=448g, $110.00.

3396 Quarantina Raab (40 days) *B. rapa* (ruvo group) New in 1997 and an instant hit. Also known as Rapini here and *Broccolo Asparago* in Italian, Quarantina means "40 days." Raab is a non-heading version of broccoli with a more pungent flavor. Sow early spring to late summer. Harvest young stems, leaves and small flower buds. Steam, stir-fry or add to salads. A=2g, 60¢, ~850 seeds, B=4g, $1.00, C=14g, $1.50, D=28g, $2.50, E=112g, $10.00, K=448g, $40.00.

HYBRID BRASSICA

About 8,000 seeds per oz (28.4g).

BROCCOLI *B. o.* (botrytis group)

3410 Packman (73 days) The best choice for earliest broccoli, since we cannot get seed for our old favorite Bravo. Packman produces 6-7" flat-topped heads. Usually reliable but will button if stressed by extreme cold or excessive moisture. From Petoseed. A=1/2g, $1.00, ~95 seeds, B=1g, $1.80, C=4g, $5.00, D=14g, $12.00, E=28g, $20.00.

3422 Emperor (78 days) Regret the grower is no longer producing this superior strain. *No seed available.*

3434 Premium Crop (82 days) Long the standard main crop broccoli for commercial growers. Uniform, dependable with large 8" heads. Very few side shoots. Harvest early in rainy weather to avoid rot in centers. 1975 AAS winner from Takii in Japan. Tolerant to DM. A=1/2g, $1.00, ~125 seeds, B=1g, $1.80, C=4g, $5.00, D=14g, $12.00, E=28g, $20.00.

3442 Green King (85 days) Green King's exceptional tenderness made it the best-tasting of the 23 varieties in our 1994 trial. Green King also scored high for its consistent yield of large uniform high-quality 8" heads. Market growers will appreciate its uniform ripening. Vigorous plants bear thick blue-green domed heads with rather large beads. Side shoots are large but not plentiful. Green King stands heat well. Be sure to try this outstanding find which could set the standard for the next generation of hybrid broccoli. A=1/2g, $1.00, ~165 seeds, B=1g, $1.80, C=4g, $5.00, D=14g, $12.00, E=28g, $20.00.

3452 Green Valiant (90 days) This excellent fall broccoli makes irregular heads in midsummer heat. Compact plants with very dense light green heads on heavy stems. Even at 8-9" diameter, heads remain extremely tight. The most prolific side shoot producer on our list. A=1/2g, $1.00, ~125 seeds, B=1g, $1.80, C=4g, $5.00, D=14g, $12.00, E=28g, $20.00.

3462 Arcadia (94 days) Growers who like Green Valiant's dense heads but not its light green color will appreciate Arcadia's frosty bluish-green heads with very refined, small beads that hold a long time. Arcadia was the only broccoli which performed well in our trials during the hot summers from 1989 through 1991. Gently mounded dome-shaped heads are consistently of marketable quality. *The best broccoli for midsummer.* A=1/2g, $1.00, ~100 seeds, B=1g, $1.80, C=4g, $5.00, D=14g, $13.00, E=28g, $25.00.

3472 Natalino Romanesco (120 days) A unique open-pollinated heirloom from Northern Italy. When well grown, it is one of the most beautiful plants in the garden with its cone-shaped, somewhat irregular whorl of chartreuse florets. When not well grown, the whorls are small and ugly. The trick is to maintain extremely high soil fertility. We had fantastic results planting in raised beds with 8" of well-rotted manure. Well-grown plants are huge, and need about 10 sq. ft. each. Should be started indoors in March or April and transplanted out in late May or June. Maturity is irregular and can occur any time between August and October. A=1/2g, $1.00, ~125 seeds, B=1g, $1.80, C=4g, $5.00, D=14g, $7.00, E=28g, $12.00.

3475 Broccoli Blend (73-94 days) For home gardeners who want broccoli to mature over a long season, a mix of varieties in one packet makes a lot of sense. Begin your harvest with Packman and carry through to Arcadia without having to purchase a full packet of each kind. A=1/2g, $1.00, B=1g, $1.80, C=4g, $5.00, D=14g, $12.00, E=28g, $20.00.

ORIENTAL GREENS

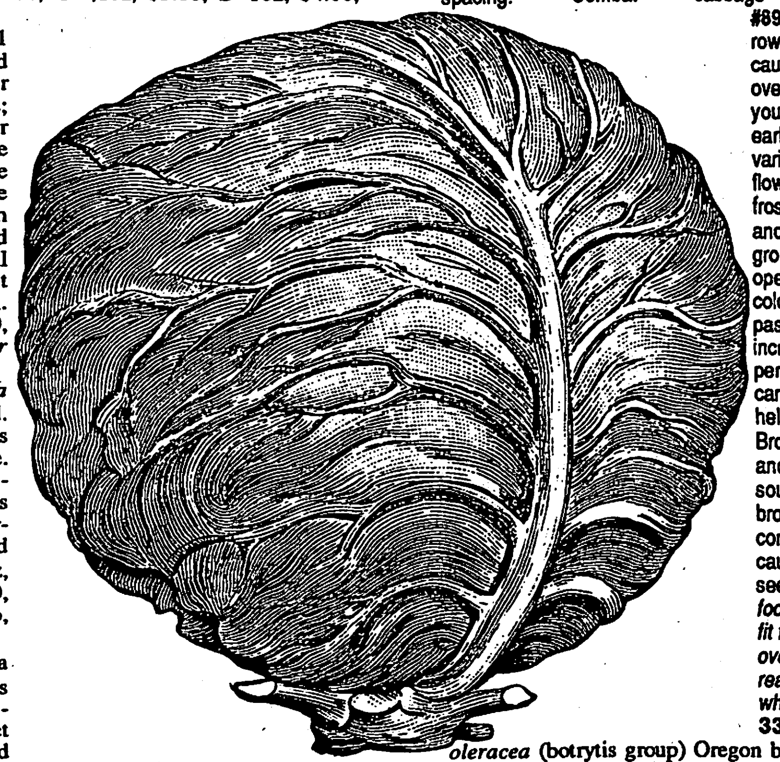
We do considerable trials work with these greens in search of new opportunities to broaden our palates. See also **#6858-6860.**

3208 Maruba Santoh (35 days) *Brassica rapa* (pekinensis group) Open-pollinated. With Maruba you get two vegetables in one: a mild piquant flavor similar to mustard in the loose round light green leaves and a juicy crisp pac choi taste in the flat white stem. Fairly bolt tolerant, so plant after the early spring flea beetle invasion subsides. A=1/16oz, $1.00, ~640 seeds, B=1/8oz, $1.80, C=1/2oz, $3.00, D=1oz, $4.00, E=4oz, $12.00, K=1lb, $40.00.

MUSTARDS

1/16 oz packet sows 40 ft, approx 15,600 seeds per oz.

3228 Mizuna (40 days) *B. r.* (japonica group) Open-pollinated. Vigorous heirloom Japanese mustard produces slender white stalks with deeply cut and fringed dark green leaves. Not pungent. One planting could suffice for full season production if you watered it in dry spells and kept it cut. Three or more successions would be required for the more discriminating connoisseur because the young leaves are more tender. In our 1995 trial, this strain was considerably more bolt-resistant than Kyona. Biennial. Essential in mild mesclun. A=1/16oz, $1.00, B=1/8oz, $1.80, C=1/2oz, $3.00, D=1oz, $4.00, E=4oz, $12.00, K=1lb, $30.00.



3234 Tokyo Beau (45 days) F-1 hybrid. *B. r.* (japonica group) A hybrid version of Mizuna with bigger, broader leaves; thicker, wider and whiter stems; and more vigor. Milder and sweeter flavor than Toraziroh. A dual purpose vegetable: The leaves can be cut like Mizuna's; the stem can be enjoyed like pac-choi or chinese cabbage. Both leaves and stems are excellent stir-fried or braised. Although Beau stood all summer with only scattered bolting, it is particularly cold tolerant as well. A=1/16oz, $1.00, B=1/8oz, $1.80, C=1/2oz, $3.00. *Not available in larger sizes*

3236 Red Giant (45 days) *B. juncea* (integlifolia group) Open-pollinated. Large purple-tinted savoyed leaves make the 18" plants very decorative. Gene compares their taste to horseradish. I prefer to call it "peppery." It is less hot during cool weather. This heirloom Japanese mustard is a standard ingredient in spicy mesclun. A=1/16oz, $1.00, B=1/8oz, $1.80, C=1/2oz, $3.00, D=1oz, $4.00, E=4oz, $12.00, K=1lb, $30.00.

3244 Tatsoi (45 days) *B. r.* (narinosa group) Open-pollinated. Also known as Tah Tsai. Spoon-shaped thick dark-green leaves make beautiful compact rosettes with mild brassica flavor. Good stir-fried. Will come back when cut. Since our purchaser Nikos Kavanya first brought it to our attention, it has become an essential ingredient in our salads and mesclun. A=1/16oz, $1.00, B=1/8oz, $1.80, C=1/2oz, $3.00, D=1oz, $4.00, E=4oz, $12.00, K=1lb, $25.00.

3252 Toraziroh (45 days) *B. alboglabra* Open-pollinated. Here's a robust performer with just the right kind of mustardy bite. It rapidly develops prolific yields of large very dark green leaves distinctively but not overwhelmingly pungent. In two years of trials won many favorable reviews from brassica lovers. Stems, also edible, have a flavor somewhat like pac choi. Relatively slow to bolt. *Order early; seed in short supply.* A=1/16oz, $1.00, B=1/8oz, $1.80, C=1/2oz, $3.00. *Not available in larger sizes.*

PAC CHOI *B. r.* (chinensis group)

1/16 oz packet sows 30 ft, approx 12,500 seeds per oz. Pac choi and carrots are among the best sources of beta carotene.

3260 Mei Qing (45 days) F-1 hybrid. Baby pac choi with green stems likes cool temperatures. Bolt resistant. Vase-shaped plants have broad green petioles with beautiful dark leaves. A=1/16oz, $1.00, B=1/8oz, $1.80, C=1/2oz, $6.00, D=1oz, $10.00, E=4oz, $36.00, K=1lb, $120.00.

3270 Prize Choy (50 days) Open-pollinated. Classy pac choi with celery-like white stems and vase-shaped 15-18" tall heads. Seed organically grown. A=1/16oz, $1.00, B=1/8oz, $1.80, C=1/2oz, $4.00, D=1oz, $7.00, E=4oz, $25.00, K=1lb, $90.00.

CHINESE CABBAGE *B. r.* (pekinensis group)

1/16 oz packet sows 25 ft, approx 9,500 seeds per oz.

3276 Blues (52 days) F-1 hybrid. Better bolt resistance, disease resistance and taste than Nagoda 50. Flavor is relatively pungent. Suitable for planting early spring through July. You won't have to pay many dues to enjoy these Blues! Moderate tolerance to virus, DM, ALTS, BSR. A=1/16oz, $1.00, B=1/8oz, $1.80, C=1/2oz, $6.00, D=1oz, $12.00, E=4oz, $40.00, K=1lb, $120.00.

CHRYSANTHEMUM *C. coronarium*

3292 Garland Serrated (40 days) Open-pollinated. Grown for its aromatic greens with an unusual taste appreciated by devotees. Compared to other Shungiku varieties in our trial, this strain was superior: Its 5" flowers (buttercup yellow, edged in white with serrated tips) were larger and better for the edible flower market and its small grey-green serrated leaves had distinctly more chrysanthemum taste. The Japanese use it in hearty one-pot winter stews known as *oden*. Also good in salads, soups, and stir-fries. Plant thickly in early spring (or summer for a fall crop) and harvest green leaves when stems are 4-8 inches tall, before buds appear. A=1/16oz, $1.00, ~890 seeds, B=1/8oz, $1.80, C=1/2oz, $3.00, D=1oz, $4.00, E=4oz, $12.00, K=1lb, $30.00.

OPEN-POLLINATED BRASSICA

2 gram packet sows 45 ft. About 8,000 seeds per oz. Hardy. May be started indoors Mar.-Apr. for setting out in May, or direct-seeded in May or June for fall crop. For better stands in dry conditions sow in trenches. Kale and collards should be direct-seeded in July for Sept. maturity. Require warm temperatures to germinate. Need 60s during seedling stage for optimal growth; higher temperatures make seedlings leggy. Heavy feeders; for best growth, need regular moisture and 2-3' spacing. Combat cabbage loopers with Bt (see **#8901-7** in the supplies section). Use floating row covers to keep out flea beetles. When cauliflower heads first appear, bend leaves over curd to prevent discoloring. We welcome your suggestions for a good open-pollinated early cauliflower variety. Some brassica varieties perform poorly in hot summers. Cauliflower and broccoli are damaged by hard frosts, especially in spring. Brussels sprouts and kale are the hardiest members of the group. We have yet to find a satisfactory open-pollinated brussels sprout variety for our cold region. Please send suggestions. Over the past thirty years broccoli consumption has increased tenfold, but still only equals 3.3 lb. per capita per year. Broccoli contains significant levels of sulforaphane, a substance that helps detoxify carcinogens from the body. Broccoli is also exceptionally high in vitamins A and C, and along with collards and kale, a rich source of calcium. Research indicating that broccoli seed sprouts are more effective in combating cancer than the vegetable itself caused a run on open-pollinated broccoli seeds. *The broccoli seed which we offer is not food grade and we cannot guarantee that it is fit for human consumption. We have no control over the conditions in which it is stored before it reaches us. Please consult your health food wholesaler or retailer for sprouting seed.*

3310 Thompson Broccoli (92 days) *B. oleracea* (botrytis group) Oregon breeder Tim Peters, who has done much work with open-pollinated broccoli, rates Thompson as better than his earlier development Umpqua. When grown under fertile conditions, Thompson shows excellent resistance to stress and greater uniformity than Umpqua. Dark green heads average 5-6" in diameter, a few days later and without the occasional throwbacks which marred Umpqua. We are pleased to offer this excellent open-pollinated broccoli for fall crops. A=2g, 60¢, ~400 seeds, B=4g, $1.00, C=14g, $2.50, D=28g, $5.00, E=112g, $16.00. *No size K, order size E.*

3324 Early Jersey Wakefield Cabbage (63 days) *B. o.* (capitata group) This wonderful early cabbage originated in England in the early 1800s, was perfected by a German truck gardener in northern New Jersey and released by Peter Henderson in 1868. Wakefield's compact medium 2-3 lb. heads are distinctively pointy, if not intellectual. (Mark Twain said that a cauliflower is a cabbage with a college education, so I guess Wakefield did not matriculate.) Tender, flavorful waxy-looking Wakefield has stood the test of the ages and is still prized by home and market gardeners alike. A=2g, 60¢, ~620 seeds, B=4g, $1.00, C=14g, $1.50, D=28g, $2.50, E=112g, $4.00, K=448g, $10.00.

3334 Laso Red Cabbage (75 days) *B. o.* (capitata group) Slightly dwarfed variety with attractive round 2-3 lb. heads. Few wrapper leaves. A=2g, 60¢, ~1000 seeds, B=4g, $1.00, C=14g, $1.50, D=28g, $2.50, E=112g, $8.00, K=448g, $20.00.

3338 Danish Ballhead Cabbage (100 days) *B. o.* (capitata group) We've been looking for more open-pollinated brassicas. What better one than Danish Ballhead, which has been the standard storage cabbage since Burpee introduced it in 1887? Almost round 5-7 lb. blue-green heads grow well in cool climates. Will make marketable size by late summer, or hold till ready for storage in October. Very slow to split. Stores till late spring with a pleasing texture and flavor. Last offered by Fedco in 1991. **BACK!** A=2g, 60¢, ~1000 seeds, B=4g, $1.00, C=14g, $1.50, D=28g, $2.50, E=112g, $8.00, K=448g, $12.00.

3348 Dominant Cauliflower (94 days) *B. o.* (botrytis group) Where adaptable, Dominant produces a beautiful fall crop of elegant 4-6 lb. heads. It does not perform well in sandy soils under dry conditions, but is a star on highly fertile loams and clay soils. Suitable only for late crops. A=2g, 60¢, ~500 seeds, B=4g, $1.00, C=14g, $3.00, D=28g, $5.00, E=112g, $20.00, K=448g, $80.00.

3358 Champion Collards (60 days) *B. o.* (acephala group) Rich dark strain selected to stand longer. Resembles kale, but not savoyed. Thin to 12" apart for good size. Best as a fall crop. For greens into November; popular in the South for greens throughout the winter. A=2g, 60¢, ~665 seeds, B=4g, $1.00, C=14g, $1.50, D=28g, $2.50, E=112g, $4.00, K=448g, $7.00.

3372 Konserva Kale (60 days) *B. o.* (acephala group) Heavier yielding than Vates. Plants grow 2-2½' tall, leaves curl in cold weather. Very nutritious and exceptionally cold hardy. A=2g, 60¢, ~665 seeds, B=4g, $1.00, C=14g, $1.50, D=28g, $2.50, E=112g, $8.00, K=448g, $12.00.

3382 Red Russian Kale organic seed (60 days) *B. napus* (pabularia group) Called Buda Kale by Fearing Burr in 1863 and Ragged Jack by Vilmorin-Andrieux in 1885. Russian traders brought this Siberian heirloom to Canada in the 19th century. It has undergone a rousing revival in the last ten years. Its oakleaf foliage colors after fall frosts. Red and purple leaves change to dark green when cooked. Use soon after picking; wilts quickly. Vigorous edible landscape plant has proven a big hit with customers for its unsurpassed tenderness and delicate flavor. Seed organically grown in Washington state. A=2g, 60¢, ~800 seeds, B=4g, $1.00, C=14g, $3.00, D=28g, $5.00, E=112g, $16.00, K=448g, $60.00.

3383 Red Russian Kale commercial seed (60 days) Same as above except commercially grown seed is more economical in the larger sizes. A=2g, 60¢, ~800 seeds, B=4g, $1.00, C=14g, $1.50, D=28g, $2.50, E=112g, $5.00, K=448g, $16.00.

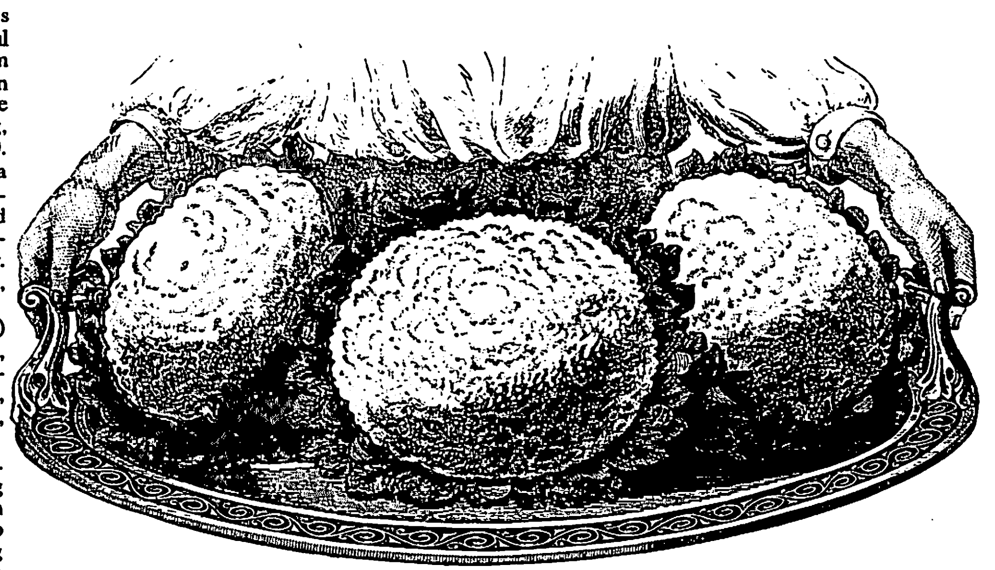
3385 White Russian Kale (60 days) *B. n.* (pabularia group) A flat-leaf Siberian type, silvery green with white veining. Similar to Red Russian, but a few inches taller, a third more productive, with larger, more serrated leaves. Also, much hardier than Red Russian, will hold into November without protection and thrive in an unheated greenhouse, even if temperatures go down to 0°. Gene has harvested White Russian outdoors in Waterville out of the January snow. If season is extended, White Russian will produce new clusters of smaller tender secondary leaves from old axils. As with other Siberian Kales, flavor gets sweeter with frost. Seed grown without pesticides, herbicides or chemical fertilizer. A=2g, $1.20, ~490 seeds, B=4g, $2.00, C=14g, $6.00, D=28g, $12.00, E=112g, $36.00, K=448g, $140.00.

3387 Cavolo Palmizio or Nero di Tuscana (62 days) *B. o.* (acephala group) Also known as Dinosaur or Lacinato Kale. Described by Vilmorin-Andrieux in 1885. William Woys Weaver traced it back to the eighteenth century. Cavolo Palmizio seems elemental, a stripped-down version of kale shaped like a miniature palm tree about 18" high. Very dark-green wrinkled strap-like leaves appear almost black at a distance, looking minimalist compared with the more common lush curly leaved kales. Delicious and nutritious as well as adaptable to a wide temperature range, its sweet mild flavor improves after frost. We thank Faviana Olivier for acquainting us with this unique heirloom and providing us with the stock seed. A=2g, 60¢, B=4g, $1.00, C=14g, $3.00, D=28g, $5.00, E=112g, $20.00, K=448g, $70.00.

3390 Early White Vienna Kohlrabi (58 days) *B. o.* (gongylodes group) Early dwarf heirloom variety with short tops and medium-sized stems. Bulbs have crisp white tender flesh with a pungent taste. Don't like kohlrabi? Try harvesting it young when it tastes like a humble version of the globe artichoke. Its texture turns tough, woody, and inedible if you wait too long. From Central Europe before 1860. A=2g, 60¢, ~590 seeds, B=4g, $1.00, C=14g, $1.50, D=28g, $2.50, E=112g, $4.00, K=448g, $10.00.

3392 Gigante Kohlrabi (130 days) *B. o.* (gongylodes group) Tom Vigue and Eileen Fingerman introduced us to this Czechoslovakian heirloom, a staple of their root cellar. Unlike other kohlrabi, Gigante doesn't get woody even when it grows enormous. And it can grow quite large, regularly exceeding 10" in diameter and 10 lb. According to Nichols Garden Nursery, the world record is 62 lb., leaves included. Even in the spring, its crisp white mildly tangy flesh stays tender and never gets fibrous. Gigante will add zest to your meals while you await the first edible greens of spring. Sow in spring for late fall harvest. A=2g, 60¢, ~620 seeds, B=4g, $1.20, C=14g, $4.00, D=28g, $8.00, E=112g, $28.00, K=448g, $110.00.

3396 Quarantina Raab (40 days) *B. rapa* (ruvo group) New in 1997 and an instant hit. Also known as Rapini here and *Broccolo Asparago* in Italian, Quarantina means "40 days." Raab is a non-heading version of broccoli with a more pungent flavor. Sow early spring to late summer. Harvest young stems, leaves and small flower buds. Steam, stir-fry or add to salads. A=2g, 60¢, ~850 seeds, B=4g, $1.00, C=14g, $1.50, D=28g, $2.50, E=112g, $10.00, K=448g, $40.00.



HYBRID BRASSICA

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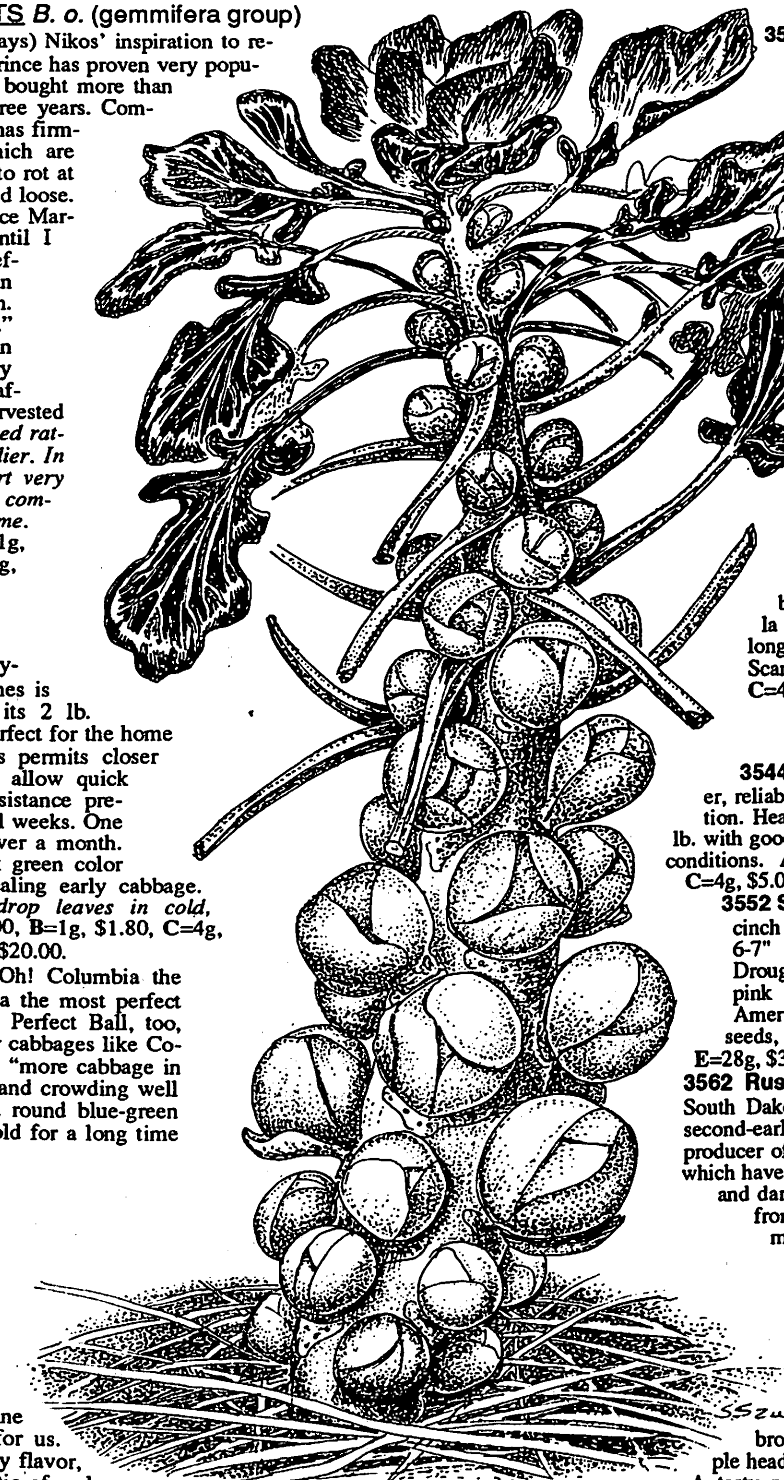
BRUSSELS SPROUTS *B. o.* (gemmifera group)

3480 Prince Marvel (110 days) Nikos' inspiration to replace Jade Cross E with the Prince has proven very popular with customers who have bought more than 3550 packets over the last three years. Compared to Jade, Prince Marvel has firmer and smoother sprouts, which are more uniform and less likely to rot at the bottom or to grow large and loose. But the real reason to try Prince Marvel is *taste*. Nikos says, "Until I cooked Prince Marvel I was definitely *not* a brussels sprouts fan and all of my kids hated them. Now we all clamor for more." For best results, start indoors in spring and transplant into very rich soil. Sprouts taste better after light frosts and can be harvested into December some years. *Seed rated low for vigor by our supplier. In our experience, seedlings start very slowly, but equal or surpass comparable varieties by harvest time.* A=1/2g, $1.00, ~50 seeds, B=1g, $1.80, C=4g, $7.00, D=14g, $20.00, E=28g, $36.00.



CABBAGE

B. o. (capitata group)

3503 Hermes (62 days) F-1 hybrid. Quick as Mercury, Hermes is off and growing, producing its 2 lb. round heads in record time. Perfect for the home garden where its compactness permits closer spacing, its small firm heads allow quick consumption and its burst resistance preserves its usefulness for several weeks. One head in our trials stood for over a month. With its small core, rich dark green color and excellent flavor, an appealing early cabbage. *Caution: Hermes seedlings drop leaves in cold, windy conditions.* A=1/2g, $1.00, B=1g, $1.80, C=4g, $5.00, D=14g, $12.00, E=28g, $20.00.

3506 Columbia (74 days) Oh! Columbia the gem of the cabbage, Columbia the most perfect ball! Seriously, we've missed Perfect Ball, too, but the trend is toward smaller cabbages like Columbia, whose motto could be "more cabbage in less space." Compact plants stand crowding well and deliver 2-4 lb. very solid round blue-green heads 6" in diameter which hold for a long time without splitting. Best of all, Columbia comes through with a delicious sweet flavor that just might remind you of Perfect Ball. Resistant to tipburn and FY. A=1/2g, $1.00, ~90 seeds, B=1g, $1.80, C=4g, $5.00, D=14g, $12.00, E=28g, $20.00.

3508 Grand Prize (76 days) The top choice in Jeanne Griffin's early cabbage trial for us. "Has the extra size, sweet juicy flavor, and classy looks uncharacteristic of early varieties!" says Jeanne. Slightly flattened heads average 5 lb. with tight wrapper leaves. FY resistant. Henry Tewksbury of Brattleboro, VT, reports: "Grand Prize made the best sauerkraut ever and lasted fresh in my basement until mid-February." He calls it "the densest, most compact cabbage I've ever seen in 33 years of organic gardening." A=1/2g, $1.00, ~125 seeds, B=1g, $1.80, C=4g, $5.00, D=14g, $6.00, E=28g, $10.00.

3518 Julius Savoy (80 days) We've trialed a number of savoy cabbages and Julius is head and wrappers above the rest, remarkable for its heavily savoyed 4-5 lb. tight blue-green heads ripening just before midseason. Each is a uniform perfectly proportioned globe. Julius will just draw you into the cabbage patch to admire it. We wouldn't have believed a green cabbage could be so handsome. Not yellows tolerant. *Order early, seed in short supply.* A=1/2g, $1.00, ~110 seeds, B=1g, $1.80, C=4g, $5.00. *Not available in larger sizes.*

3526 Super Red 80 (80 days) Super Red 80 ripens after Laso, but well before Ruby Perfection, with tight round medium-dark red heads in the 3-5 lb. range. Splendid appearance will please market growers. A=1/2g, $1.00, ~90 seeds, 95¢, B=1g, $1.80, C=4g, $5.00, D=14g, $16.00, E=28g, $30.00.

3536 Ruby Perfection (85 days) This fancy midseason type has produced some of the loveliest cabbage we've ever seen: solid deep purple-red globe-shaped heads averaging 4-6 lb., occasionally reaching 8 lbs. A great storage cabbage; will keep till May in the root cellar. Low tolerance to black rot. Seed is on hand so there will be no disappointments. A=1/2g, $1.00, ~125 seeds, B=1g, $1.80, C=4g, $5.00, D=14g, $16.00, E=28g, $30.00.

3540 Scanbo (95 days) The best keeper in Donna Dyrek's storage trial, lasting until May 1 heeled into dirt in her root cellar. Scanbo produces medium-sized sweet dark 4-5 lb. green heads, very firm and solid straight through the core. Late Langendijk type can be spaced closely. Tolerant to Mycosphaerella and thrips. Our years-long search for a tasty long-keeping storage cabbage reached fruition in Scanbo. A=1/2g, $1.00, ~95 seeds, B=1g, $1.80, C=4g, $5.00, D=14g, $13.00, E=28g, $25.00.

CAULIFLOWER

B. o. (botrytis group)

3544 Majestic (68 days) Our earliest cauliflower, reliable and reasonably sized for summer production. Heads average 5-6", weighing from 10 oz. to 1 lb. with good color. Rugged enough to withstand hot dry conditions. A=1/2g, $1.00, ~100 seeds, B=1g, $1.80, C=4g, $5.00, D=14g, $13.00, E=28g, $25.00.

3552 Snow Crown (70 days) Makes cauliflower a cinch to grow. Dependable producer of uniform 6-7" heads early summer through October. Drought resistant. Very early. Some tendency for pink heads in adverse conditions. 1975 All-America winner from Takii. A=1/2g, $1.00, ~70 seeds, B=1g, $1.80, C=4g, $5.00, D=14g, $16.00, E=28g, $30.00.

3562 Rushmore (74 days) We haven't trialed it in South Dakota, but Rushmore stands alone as the best second-early variety for the Northeast. A reliable producer of uniform 2 lb. very white high-domed curds, which have looked good even in the heat. Its large frame and dark green leaves provide some curd protection from sun and frost. Slightly larger, later and more uniform than Snow Crown with no pink heads. Introduced in 1996 and an instant hit. A=1/2g, $1.00, ~200 seeds, B=1g, $1.80, C=4g, $7.00, D=14g, $20.00. *Not available in size E, order size D.*

3570 Violet Queen (80 days) About halfway between broccoli and cauliflower, each plant sets one purple head which doesn't require tying. No side shoots. A tasty novelty for adding color to salads and dips. Turns light green when blanched. A=1/2g, $1.00, ~100 seeds, B=1g, $1.80, C=4g, $7.00, D=14g, $20.00. *Not available in size E, order size D.*

3578 Candid Charm (95 days) Charm produces large curds, in the same class as Dominant, but less fussy. Holds snow-white color a long time. Recommended for fall crops only. We've grown some awesome heads. Our largest, 12x14", weighed 6 1/2 lb. and won a $5 bet. Most were in 3-4 lb. range. A=1/2g, $1.00, ~100 seeds, B=1g, $1.80, C=4g, $5.00, D=14g, $16.00, E=28g, $30.00.

KALE *B. o.* (acephala group)

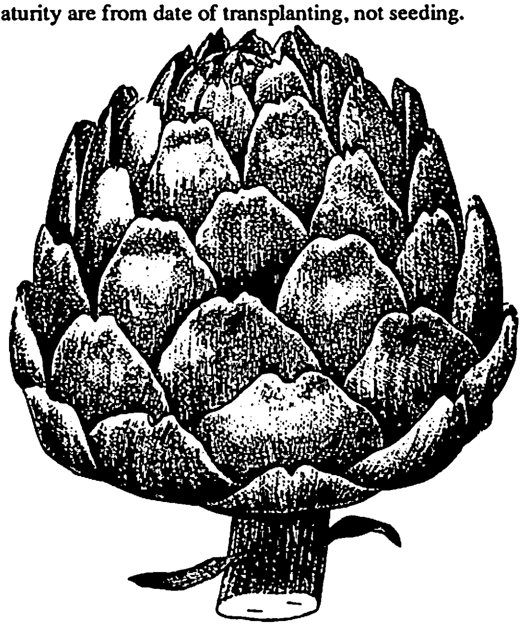
3586 Winterbor (60 days) Winterbor was the most vigorous grower in each of our last three kale trials, showing the best cold hardiness and the richest blue-green color. Curled leaves are highly ruffled. A=1/2g, $1.00, ~95 seeds, B=1g, $1.80, C=4g, $5.00, D=14g, $16.00, E=28g, $30.00.

KOHLRABI *B. o.* (gongylodes group)

3594 Kolibri (45 days) The best purple kohlrabi we've found. It is quick growing, very uniform, purple on the outside, crisp and white on the inside. A=1/2g, $1.00, B=1g, $1.80, C=4g, $5.00, D=14g, $16.00, E=28g, $30.00.

ARTICHOKE, CELERY, EGGPLANT, OKRA

Days to maturity are from date of transplanting, not seeding.



GLOBE ARTICHOKE *Cynara scolymus*

Start indoors at temperatures as near 60° as possible and avoid direct hot sun or overwatering (misting is preferred). Use IRT plastic mulch (#9116-8) and/or row covers. Feed heavily and give almost as much space as Romanesco Broccoli (10 sq. ft. per plant).

3608 Imperial Star (120 days) Open-pollinated. This delicious vegetable is now accessible to northern gardeners. One Vermont customer called growing artichokes the highlight of her 1996 season. We've seen good specimens at the Exhibition Hall at Common Ground Fair and at Hidden Valley Farm in Alna. Market gardener Alan LePage has had success with Imperial Star in Barre, VT, getting as many as eight fruits off a single plant. Most plants will bear more than one, producing most in the cooler fall weather which they prefer to summer's full heat. Plants (both seedlings and mature) can tolerate light, but not hard, frosts. *Caution: May not ripen in northernmost areas.* A=1/2g, 80¢, ~10 seeds, B=*not available*, C=1g, $1.50, D=4g, $6.00, E=28g, $28.00.

CELERY & CELERIAC *Apium graveolens*

0.2 gram packet about 540 seeds, 0.4 gram packet about 1080 seeds, 75,000 seeds per oz. Tender, must be started indoors in March, 10-12 weeks before setting out. Slow growers require rich moist soil to survive.

3616 Afina Cutting Celery (60 days) Open-pollinated. Afina is notable for its sturdy dark green foliage with rich aroma and taste. It regenerates quickly after cutting. Dutch variety imparts the same flavor to stews and soups as conventional celery. Although its culture is the same, it is much hardier and easier to grow. Both its thin hollow stems and its leaves can be used fresh or dried. Grows up to 30" tall. A=.2g, 80¢, B=.4g, $1.50, C=1g, $2.50, D=4g, $3.00, E=28g, $6.00.

3624 Ventura Celery (80 days) *A. g.* var. *dulce* Open-pollinated. Presumably named for Ventura County, CA, where celery is the third-leading cash crop. I always found celery difficult to grow until I tried Ventura. Develops beautiful thick crisp stalks with rich but never harsh flavor even in less than ideal conditions. Because it has some tolerance to fusarium, Ventura doesn't seem to get the punky centers which sometimes plague Utah. A=.2g, 80¢, B=.4g, $1.50, C=1g, $2.50, D=4g, $3.00, E=28g, $6.00.

3632 Par-Cel Cutting Celery (72 days) Open-pollinated. Five years ago market gardener Eva Sommaripa suggested that we carry this curly cutting celery which looks like parsley but tastes more like celery. We held off because we could not find a supplier. Now we offer Sommaripa's own seed. In several outdoor trials we've found it a fussy germinator, so we recommend an indoor start. Although it withstands heat and drought, Par-Cel is remarkably cold-tolerant, lasting well into late fall. Tremendously vigorous once established—a half dozen plants would be sufficient even for the aficionado. Makes a terrific garnish, also adds a welcome zest to salads and soups when the leaves are young and tender. As they age they develop a strong flavor not for delicate palates so you may want to cut them back once the roots are well established. A=.2g, 80¢, ~400 seeds, B=.4g, $1.50, C=1g, $2.50, D=4g, $9.00. *Not available in larger sizes.*

3644 Diamante Celeriac (100 days) *A. g.* var. *rapaceum* F-1 hybrid. A classy celeriac with nicely sized roots that stand above the ground (for ease of harvest and cleaning), no hollow crown and very few offshoots. I have found that hybrids size up much more quickly than open-pollinated celeriacs. An early start indoors is essential for good yields. If you haven't yet dared to try celeriac, give Diamante's clean white internal coloration and superb eating quality a chance. A=.2g, 80¢, B=.4g, $1.50, C=1g, $2.50, D=4g, $10.00, E=28g, $60.00.

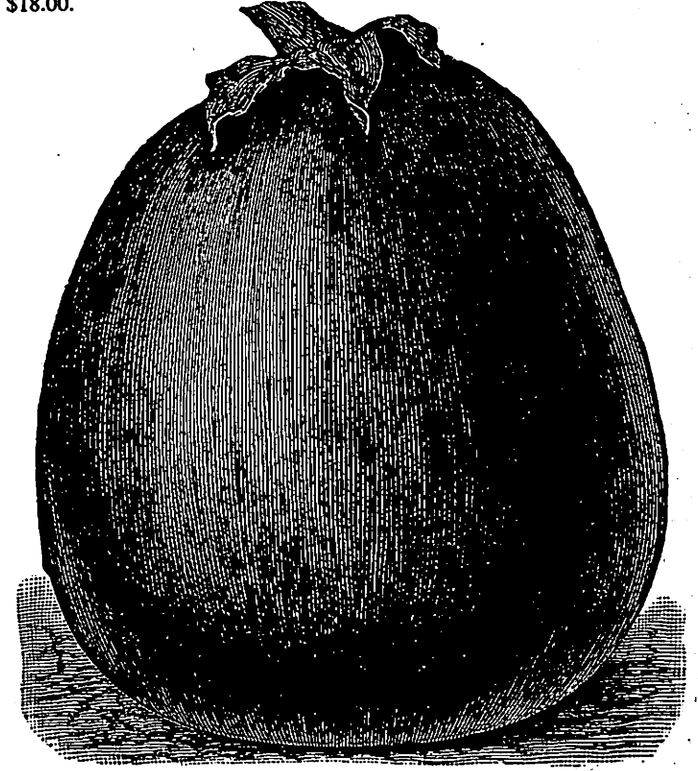
EGGPLANT *Solanum melongena*

.2 gram packet about 48 seeds, .4 gram packet about 96 seeds. Likes same growing conditions as peppers, but is even more of a challenge in our short season. The selections below are the most reliable producers we've found. We are looking for more, but often in our climate even our highly skilled trialers can get only sparse production of ripe fruits.

3666 Swallow (51 days) F-1 hybrid. If past failure with this vegetable has been a bitter pill to swallow, this Swallow might leave a better taste. Swallow is *early*, producing glossy purple-black tender fruit of the elongated (1 3/4x7") oriental type without the bitterness often associated with larger eggplants. Our best-selling eggplant; 680 packets in 1998. A=.2g, 80¢, ~55 seeds, B=.4g, $1.50, C=1g, $3.00, D=4g, $10.00, E=28g, $45.00.

3674 Pingtung Long (58 days) F-1 hybrid. A long Chinese eggplant that will please cooks who enjoy the ease of working with uniform slices. Plants are vigorous, stress tolerant, and start producing early for a decent overall yield. If Pingtung is harvested before full maturity its light purple color is especially appealing. As it approaches its full 11" length, its skin will darken but retain a pleasing sheen. Has the taste to keep you coming back for more—an appealing sweetness without bitterness. A=.2g, 80¢, ~60 seeds, B=.4g, $1.50, C=1g, $2.50, D=4g, $4.00, E=28g, $18.00.

3682 Dusky (75 days) F-1 hybrid. A dependable hybrid for the North. Glossy black fruits medium-sized, oval-shaped, firm. Resistant to TMV. A=.2g, 80¢, ~50 seeds, B=.4g, $1.50, C=1g, $2.50, D=4g, $4.00, E=28g, $18.00.

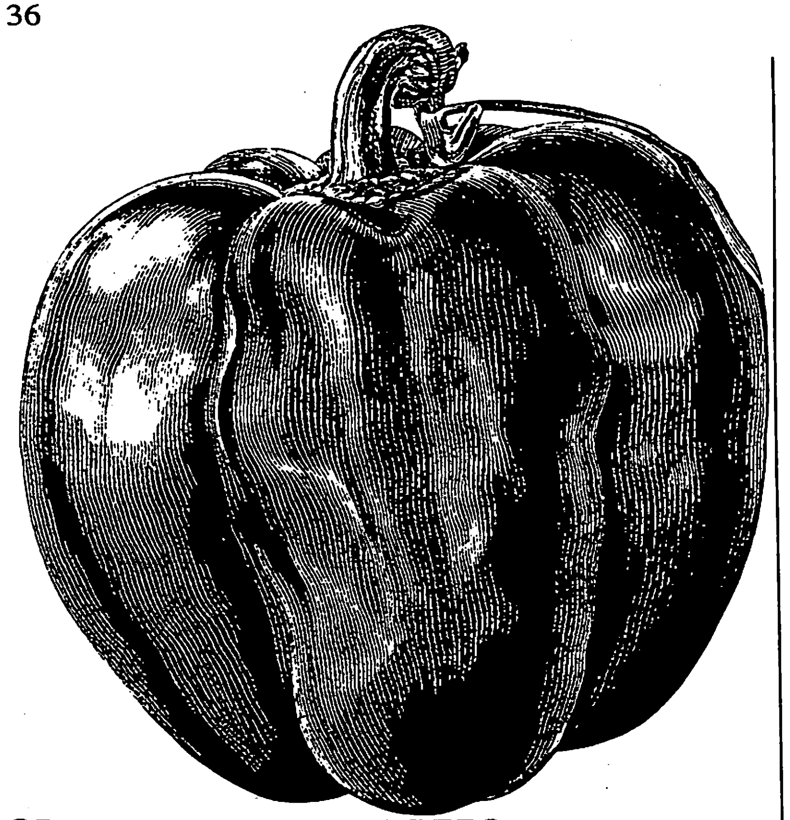


3690 Rosa Bianca (88 days) Open-pollinated. Called by Vermont market grower Alan LePage "the best eggplant in the universe," with a creamy, pudding-like consistency and delicate flavor unmatched by any other variety. Gorgeous fruits, white with lavender streaking down the side, can command $3 a pound at markets. Quite different from those familiar slender black types, Rosa is plump, about 3-4" across and 5" long, narrow at the top and going down almost in folds like draped fabric. Fruits average 2 lb, max out at 4 lb, making it LePage's highest-yielding eggplant. Rosa needs to be coddled, particularly in the northern half of New England. Needs alternating temperatures to break dormancy: warm days (preferably 80s), cooler nights (around 70). We recommend raised beds, row covers and plastic or IRT mulch. Italian heirloom. A=.2g, 80¢, ~60 seeds, B=.4g, $1.50, C=1g, $2.50, D=4g, $4.00, E=28g, $18.00.

OKRA *Abelmoschus esculentus*

2 gram packet contains about 30 seeds. Okra is very tender and requires a lot of heat. Direct seeding is marginal in our climate. We recommend starting indoors in peat pots in warm (80°) temperatures and transplanting in 4-5 weeks, after all danger of frost has passed. Transplant 1' apart; do not disturb roots.

3696 Cajun Delight Okra (70 days) F-1 hybrid. In our search for okra for our northern clime, earliness is of paramount importance. Our 1996 "endless spring" was not exactly conducive to growing this heat-lover. Yet, All-America winner Cajun Delight ripened with ease, ahead even of Annie Oakley II, and its tender dark angular pods kept on producing until frost. Those unexposed to this southern delicacy should try combining it with other ingredients in a gumbo or frying it. Add vinegar while it is cooking if you wish to rid it of its mucilaginous nature. A=2g, 80¢, ~35 seeds, B&C=*not available*, D=4g, $1.50, E=28g, $10.00.



OPEN-POLLINATED PEPPERS *Capsicum annuum*

Room temperature is *not* sufficient to germinate pepper seeds. They need 80s. Very tender, will not tolerate frost, dislike windy spots, will not set fruit in cold or extremely hot temperatures or in drought conditions. Start indoors March or April. Set out June. Black plastic highly recommended. Pick first green peppers when they reach full size to significantly increase total yield. Green peppers, though edible, are not ripe. Peppers ripen to red, yellow, orange, etc.

At GreenGenes Farm, Nikos specialized in growing market peppers, and she has made upgrading our pepper selection a major priority. In the past seven years we have added 24 new peppers, including yellow, orange and purple bells.

Green and red peppers are among the vegetables with the fewest calories and the most vitamin C.

For all peppers, days to maturity are from transplanting date.

See also **#6861-6862**.

SWEET PEPPERS

3703 Klari Baby Cheese (65 days) Also known as Golden Delicious Apple Pepper. From Hungary, a Fedco introduction. Cheese peppers are flattened, white when unripe, and filled with a soft core. Shaped like 3" Rouge Vif D'Étampes pumpkins, the squat 4 oz. fruits with mild and sweet cores were unlike anything we'd ever tried. I am not a wild-eyed pepper aficionado, but I couldn't stop eating these delicious summertime treats out of hand. Traditionally they are pickled whole after ripening from white to yellow to red. Named after the woman who has maintained this heirloom seed stock. A=$^1/2$g, 50¢, B=1g, $1.00, C=2g, $1.50, D=4g, $3.00, E=28g, $18.00.

3706 King of the North (70 days) Our most popular open-pollinated pepper. A good choice for those who want marketable blocky peppers but can't get Staddon's Select to set fruit. Offered by Burpee in 1955 for 15¢ a packet and $1.20 an ounce. A=$^1/2$g, 50¢, ~100 seeds, B=1g, $1.00, C=2g, $1.50, D=4g, $3.00, E=28g, $5.00.

3714 Boldog Hungarian Spice Sweet Paprika (71 days) This Boldog from Hungary has no bite. A prolific bearer of 6x4" 2-lobed pendant fruits which are picked red, and ground into sweet paprika or strung into decorative paprika ristras. These bright tapering fruits also make good fresh eating. Luckily, Boldog sets enough fruit to accomodate all three uses. A=$^1/2$g, 50¢, B=1g, $1.00, C=2g, $1.50, D=4g, $3.00, E=28g, $18.00.

3722 Purple Beauty (74 days) Became our first purple pepper in 1996. Produces a good yield of blocky 3x3" fruits which turn from green to purple to deep red as they mature. Purple fruits taste like other crisp green bells. Will turn green when cooked. Plants 18-20". A=$^1/2$g, 50¢, ~100 seeds, B=1g, $1.00, C=2g, $1.50, D=4g, $3.00, E=28g, $16.00.

3728 Staddon's Select (74 days) Early production of good-sized fruit in adverse conditions. Large, glossy, dark-green 3-4 lobed peppers on tall bushy plants. A good large blocky market-type pepper where fruits will set. *Caution: not adapted to northernmost areas.* A=$^1/2$g, 50¢, ~100 seeds, B=1g, $1.00, C=2g, $1.50, D=4g, $3.00, E=28g, $5.00.

3738 Cubanelle (80 days) Our customers asked for this semi-sweet frying pepper. 6x2" waxy yellow-green fruits turn red. Not pungent. A=$^1/2$g, 50¢, ~82 seeds, B=1g, $1.00, C=2g, $1.50, D=4g, $3.00, E=28g, $5.00.

HOT PEPPERS

Popularity of hot peppers has increased dramatically in recent years, and per capita consumption of chiles in the US now exceeds that of peas, asparagus and cauliflower. Retail sales of salsas have surpassed those of catsup. Hot pepper eaters enjoy the "constrained risk" of a pleasant thrill which, unlike other addictive substances like alcohol, tobacco or coffee, has only a short-term effect and is not health-threatening! Capsaicin compounds cause most of the heat in peppers. Warm nighttime temperatures stimulate maximum development of capsaicins and increase pungency levels. Pungency is expressed in Scoville units, after Wilbur Scoville, an Englishman who devised the method used from the early 1900s until about 1980 to measure the heat in peppers. If you overdose on hot peppers, milk is almost twice as effective as water in banking the flames, and bread, rice or tortillas are even better. Roberta Bunker has taken up the banner for hot peppers, trialing 23 for us in 1995, 13 in 1996, 23 in 1997 and 16 in 1998, and raising seed crops for three at her Super Chilly Farm (so named for her love for chiles and the propensity of her grounds to catch all the early frosts).

3754 Hungarian Hot Wax (68 days) Numerous customers requested this semi-hot type. Yellow $5^1/2$x$1^1/2$" fruits are smooth, waxy, tapering to a point. Sets even in cool weather. Originated in Hungary, 1941. 700 to 3,000 Scovilles. A=$^1/2$g, 50¢, ~82 seeds, B=1g, $1.00, C=2g, $1.50, D=4g, $3.00, E=28g, $5.00.

3756 Bulgarian Carrot Chile (68 days) Also known as Shipkas. We first saw this show-stopper at Amy LeBlanc's farm in 1996. Shaped and colored like a carrot, the florescent orange thin-walled $1^1/2$-$3^1/2$" fruits are as hot as they look, and will make welcome additions to chutneys, marinades and salsas, or excellent pickles. Plants grow just 18" tall, yet produce clusters of peppers close to the main stem. Their fruity undertone nicely complements their heat. Brought indoors, plants produced in Amy's greenhouse till February. Heirloom was smuggled here through the Iron Curtain 20 years ago. Now you can make a Halloween sauce using Czech Blacks and Carrot Chiles! A=$^1/2$g, $1.00, B=1g, $2.00, C=2g, $4.00, D=4g, $6.00, E=28g, $30.00.

3760 Pretty in Purple (73 days) Venturesome customers should get great enjoyment from watching this strikingly ornamental pepper ripen. The masses of rounded small shiny red hot peppers start deep purple, progressing through yellow, orange and scarlet as they ripen. What really makes Pretty in Purple spectacular is the contrast between the purple and green/purple foliage and the various colors of the fruits all in different stages of ripening. The peppers, in addition to delighting the eye, may be used sparingly to add piquancy to dishes. Plant habit upright but spreading. NEW! A=$^1/2$g, 50¢, ~100 seeds, B=1g, $1.00, C=2g, $1.50, D=4g, $3.00, E=28g, $18.00.

3764 Early Jalapeño (75 days) Hot, Hot, 3x1" sausage-shaped blunt fruits mature early. Packing the seed makes us teary-eyed! 4,000 to 6,500 Scoville units at maturity. A=$^1/2$g, 50¢, ~100 seeds, B=1g, $1.00, C=2g, $1.50, D=4g, $3.00, E=28g, $5.00.

3770 Long Red Narrow Cayenne (75 days) Often curled and twisted, peppers grow 5-6" long, $^1/2$" across, and taper to a point. Dark green color changes to bright red. Prolific and hot. Pre-1827 heirloom. 3,500 to 5,000 Scovilles. A=$^1/2$g, 50¢, ~100 seeds, B=1g, $1.00, C=2g, $1.50, D=4g, $3.00, E=28g, $5.00.

3778 Anaheim (78 days) Anaheim is the pepper used for chiles rellenos. 7" long fruits tapering to a point turn from dark-green to red at maturity. Pungent, but not particularly hot. 900 to 2,500 Scovilles. A=$^1/2$g, 50¢, ~100 seeds, B=1g, $1.00, C=2g, $1.50, D=4g, $3.00, E=28g, $5.00.

3792 Ancho 101 (85 days) Known as Ancho when dried, Poblano when used fresh, this Mexican favorite is wonderfully versatile. Uniform 4x2" thick-walled shiny dark green fruits mature into a deep red. Shaped like a pointed bell with 2 to 3 lobes, the peppers have little heat in the flesh, storing their mildly pungent flavor in their pith and seeds. A heavy cropper in hot climates, Ancho is not "peppered with peppers" in northerly climes like ours. To equal or better their average yield here of four fruits per plant, take care to start them early and protect the first blooms. 1,500-4,000 Scoville units. A=$^1/2$g, 50¢, B=1g, $1.00, C=2g, $1.50, D=4g, $3.00, E=28g, $5.00.

3796 Habanero (90 days) *C. frutescens* The name means "from Havana," although they really are from other parts of Cuba and the Yucatan. Also known as Scotch Bonnet, Habanero is reputed to be the most fiery pepper in cultivation, registering a blistering 200,000-350,000 Scoville units, depending on how hot the growing season, from 30-80 times as hot as an Early Jalapeño. Each $1^1/2$' plant will set 10-20 pendulous fruits which turn from dark green to tangerine as they mature. Fruits are somewhat wrinkled from stem to tip, with a distinct flavor you will always recognize once you've tasted them. A key ingredient in West Indian jerk sauce. We recommend greenhouse culture for the northern two-thirds of our sales area where consistent nighttime temperatures below 70° make productivity outdoors extremely iffy. A=$^1/2$g, 50¢, B=1g, $1.00, C=2g, $1.50, D=4g, $3.00, E=28g, $13.00.

HYBRID AND MAINE-GROWN PEPPERS

HYBRID SWEET PEPPERS

3810 New Ace (60 days) A cinch to grow in the North. Resists blossom drop even in adverse weather so that almost every flower produces. Fruits thin-walled, not blocky, turn red early. Good home garden kind. New Ace is an improvement on the old strain, producing fewer misshapen pointy peppers, but still not a majority of classic blocky 4-lobed commercial peppers. A=.2g, $1.00, ~40 seeds, B=.4g, $2.00, C=1g, $4.00, D=2g, $7.00, E=4g, $13.00, K=14g, $45.00.

3815 Fat 'n Sassy (63 days) Peto ought to have called this one "Bold 'n Blocky" because it'll just knock you over with its massive fruit set. They come early, they come often, they come big ($4^1/2$x$4^1/2$"), they come blocky, they come sweet, they come thick-walled. You wouldn't believe a 2' plant could carry such a load, so don't you sass me till you see it for yourself. I expect we have a lot of believers by now, because Fat 'n Sassy became our best-selling pepper in its very first listing. Widely adapted. Ripens red to green. TMV and PY tolerant. A=.2g, $1.00, ~20 seeds, B=.4g, $2.00, C=1g, $4.00, D=2g, $7.00, E=4g, $13.00, K=14g, $45.00.

3820 North Star (65 days) Early productive sweet pepper sets a high percentage of blocky medium-sized thick-walled green fruits ripening to red. North Star has sufficient foliage cover to prevent sunburn. If you're ready to try for a red pepper that's a little classier than Ace, choose North Star. TMV resistant. A=.2g, $1.00, ~33 seeds, B=.4g, $2.00, C=1g, $4.00, D=2g, $7.00, E=4g, $13.00, K=14g, $45.00.

3822 Greygo Baby (65 days) F-1 hybrid mistakenly listed as open-pollinated last year. We apologize to those who saved seeds. Wherever we've encountered it in trials the past two years, we've agreed that this baby has taste. Even those not normally fond of peppers wanted more. Ripens clusters of early small $1^1/2$x2" flattened tapered fruits of the sweet cherry type which combine a refreshing juicy sweetness with full-bodied pepper flavor. In Hungary the red peppers are traditionally stuffed with cabbage and then pickled. A=.2g, $1.00, B=.4g, $2.00, C=1g, $4.00, D=2g, $7.00, E=4g, $13.00, K=14g, $45.00.

3824 Sweet Havana (65 days) F-1 hybrid. An early productive Cubanelle pepper which turns from light yellow to green to red as it ripens. 3-4 lobed 2x5" fruits with excellent flavor. NEW! A=.2g, $1.00, ~33 seeds, B=.4g, $2.00, C=1g, $4.00, D=2g, $7.00, E=4g, $13.00, K=14g, $45.00.

3828 Banana Supreme (68 days) Banana peppers are the sweet complement to Hungarian Hot Wax Peppers. You'll want clear labels *and* demarcations in your garden if you plant both since they look alike but definitely taste different. Color develops from green-yellow to yellow to red with advancing ripeness. For its disease resistance, prolific production, and large 7-8" fruits, Supreme was the best banana pepper in Nikos' impressive 1992 trials. A=.2g, $1.00, ~40 seeds, B=.4g, $2.00, C=1g, $4.00, D=2g, $7.00, E=4g, $13.00, K=14g, $45.00.

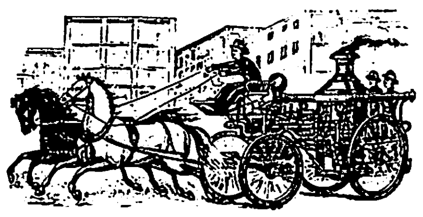
3834 Spanish Spice (70 days) Not spicy at all, despite its name. It is instead an outstanding Italian frying pepper—thin-walled and tapering with a deliciously rich flavor. Moreover, the plants are sturdy, keeping the large 7" fruits off the ground (a frequent failing of other fryers). Provides lots of green peppers and even a few red ones if you have either skill or luck. Resistant to TMV. A=.2g, $1.00, ~30 seeds, B=.4g, $2.00, C=1g, $4.00, D=2g, $7.00, E=4g, $13.00, K=14g, $45.00.

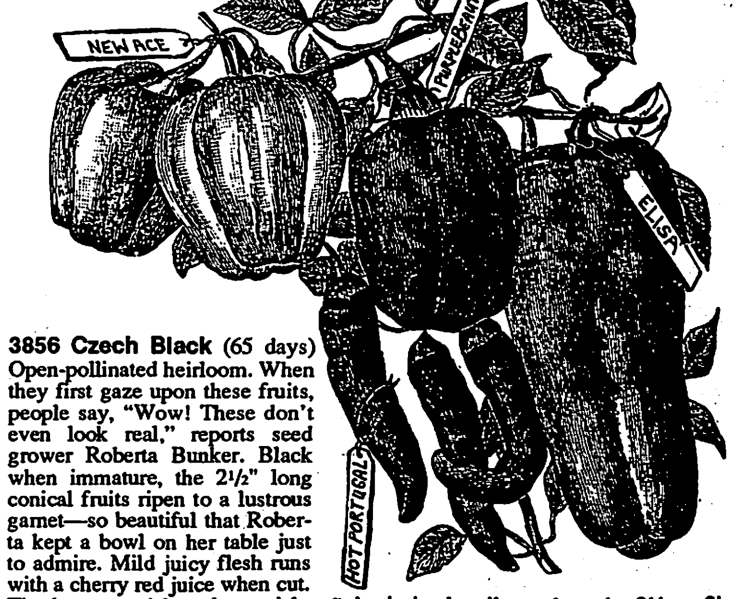
3844 Amish Pimiento (85 days) Open-pollinated. Amish Pimiento has spoiled our pepper seed grower. Although she has a garden full of other varieties not needed for seed, she'll eat only a ripe red Amish Pimiento. Blame it on the rich sweet fruity taste of these 2x4" squat, ribbed fleshy fruits, productive and relatively early. To steal the slogan from another Waterville entrepreneur (who is unfortunately in the tattoo business, not the seed business) "Welcome to your next addiction!" Seed grown in Maine without pesticides, herbicides or chemical fertilizers. NEW! A=.2g, $1.00, B=.4g, $2.00, C=1g, $4.00, D=2g, $7.00, E=4g, $13.00, K=14g, $45.00.

HOT PEPPERS

3852 Hot Portugal (64 days) Open-pollinated. Bears elongated narrow fruits, 5-8" long, 1" in diameter with the classic wrinkled hip at the stem end. Superb pepper flavor comes through its considerable heat nicely. Not as hot as Super Chili, but hotter than Early Jalapeño. Early, productive ripener of glossy scarlet fruits borne on tall plants. Early orders will get seed grown in Maine without pesticides, herbicides or chemical fertilizers. Later orders will get commercially grown seed. A=.2g, $1.00, ~33 seeds, B=.4g, $2.00, C=1g, $4.00, D=2g, $7.00, E=4g, $13.00, K=14g, $45.00.

3854 Dacia Fire (65 days) F-1 hybrid. Dacia's light yellow 5-8" fruits turn fiery orange-scarlet when they ripen, accurately foretelling the considerable heat they offer. Hotter than jalapeño and probably on a par with Hot Portugal, very early for its size and eminently marketable. Tapering to a blunt end like Hungarian Hot Wax, at least half will exceed 6". Roberta got good production, about a dozen Romanian-type fruits, from each $2^1/2$' plant. A=.2g, $1.00, ~30 seeds, B=.4g, $2.00, C=1g, $4.00, D=2g, $7.00, E=4g, $13.00, K=14g, $45.00.





3856 Czech Black (65 days) Open-pollinated heirloom. When they first gaze upon these fruits, people say, "Wow! These don't even look real," reports seed grower Roberta Bunker. Black when immature, the $2^1/2$" long conical fruits ripen to a lustrous garnet—so beautiful that Roberta kept a bowl on her table just to admire. Mild juicy flesh runs with a cherry red juice when cut. The heat, a tad less than a jalapeño's, is in the ribs and seeds. $2^1/2$ to 3' bushes bear very early, setting about 20 pointed thick-walled peppers per plant. *Crop failure this year, seed in very short supply. Order early. Available in size A only.* A=.2g, $1.00, ~40 seeds.

3872 Garden Salsa (73 days) F-1 hybrid. If the thought of ingesting habanero makes you wince, Garden Salsa may be more your style. Bred for those who complain that other salsa varieties are too hot, Garden Salsa's full-bodied sweet pepper flavor comes through without being drowned by capsaicin overload. A great cooking pepper, its fruits provide plenty of kick in homemade salsas. Large plants bear up to a dozen beautiful glossy tapered 8" fruits that ripen to red, but are often harvested green for making salsa. A consistent performer during three years of trials, often bearing under difficult conditions when others balked. 2,500-3,500 Scovilles. Resistant to TMV. A=.2g, $1.00, ~20 seeds, B=.4g, $2.00, C=1g, $4.00, D=2g, $7.00, E=4g, $13.00, K=14g, $45.00.

3877 Jalapeño Blanco (75 days) F-1 hybrid. Earlier this century certain Southern chefs had a sneaky tradition of using pale hot peppers as the "secret ingredient" in their white sauces. Jalapeño Blanco might revive this old custom. Otherwise, the large 3x2" thick-walled fruits make great yellow stuffing peppers. Enjoy this productive, flavorful, mildly hot, unusually colored pepper. NEW! A=.2g, $1.00, ~20 seeds, B=.4g, $2.00, C=1g, $4.00, D=2g, $7.00, E=4g, $13.00, K=14g, $45.00.

3880 Super Chili (75 days) F-1 hybrid. I still haven't forgotten this one at our 1990 pepper taste test at Jeanne Griffin's. I required a lot of milk to bank the lingering fires! It was the hottest of all the varieties we tried and ranks 4th on Petoseed's hot 20 with 40,000-50,000 Scoville units. Highly ornamental plants are covered with dozens of green and red 2x$^1/2$" pointy peppers. Bears prolifically whether summers are wet or dry, hot or cold. 1988 AAS. A=.2g, $1.00, ~28 seeds, B=.4g, $2.00, C=1g, $4.00, D=2g, $7.00, E=4g, $13.00, K=14g, $45.00.

3894 Thai Hot (82 days) Open-pollinated. Habanero is the only hotter pepper we list. Thai Hot, believe it or not, is grown "in the trade" as a red and green Christmas potted plant. However, devoted followers of hot cuisine prize the sparks it creates. Early pinching will produce a bushy 8" plant that can be pulled, roots and all, and hung to dry for winter use. Or grow it inside in a basket for both ornamental and edible enjoyment. Seed grown in Maine by Roberta Bunker. A=.2g, $1.00, ~66 seeds, B=.4g, $2.00, C=1g, $4.00, D=2g, $7.00, E=4g, $13.00, K=14g, $45.00.

3897 Some Like it Hot Mix (64-85 days) Love hot peppers but lack the space to try separate packets of each? Our blend of seed for 5-7 different kinds all in one packet is just for you. We'll mix colors, shapes and flavors. A=.2g, $1.00, B=.4g, $2.00, C=1g, $4.00, D=2g, $7.00, E=4g, $13.00, K=14g, $45.00.

FANCY HYBRID SWEET PEPPERS

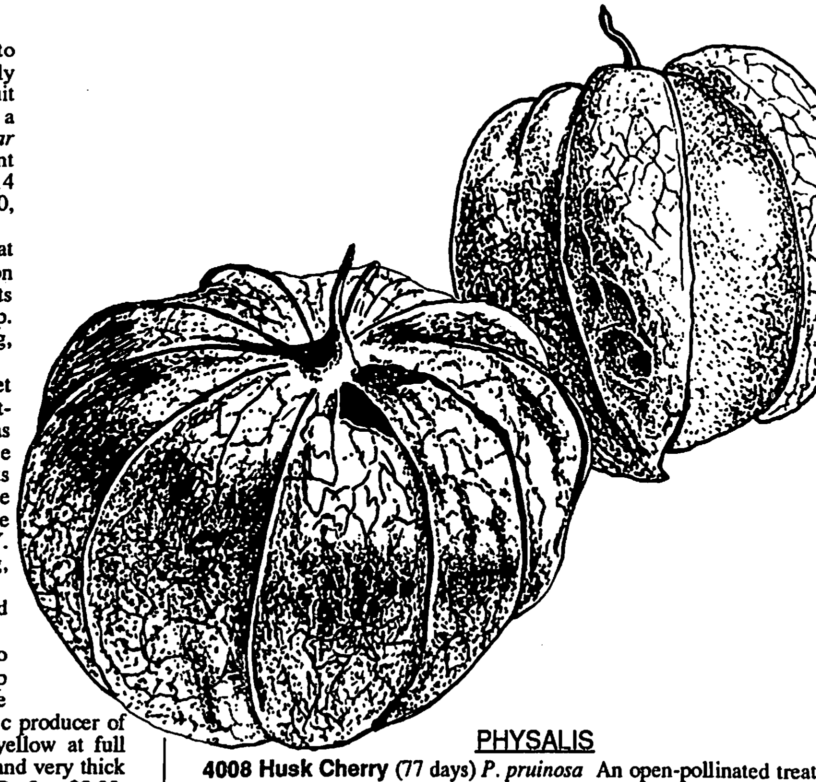
3906 Turino (68 days)
Red roaster, red roaster you sure have it all.
Red pendant massed peppers; it's not even fall.
Red roaster, red roaster they say you're so sweet.
Over six inches long, delicious, no heat.
Red roaster, red roaster you have such thick walls.
They surely won't crumble, not even in squalls.
Red roaster, Turino you're ripe 'fore full color.
I prefer you deep red, but you're tasty when duller.
Red roaster, Italian not shaped like a bell.
Square bottoms, then tapered, but oh, what the ____!
Red roaster, red roaster you're great for the North!
Which is why we continue to offer you forth!
A=.1g, $1.00, ~14 seeds, B=.2g, $2.00, C=.4g, $4.00, D=1g, $7.00, E=2g, $13.00, K=8g, $45.00.

3910 Elisa (70 days) Nikos searched years for a pepper to replace Ringer and this one might be a "dead ringer." Early maturity, tolerance to cool conditions, and big beautiful fruit ranging from deep blocky green to elongated red made this a standout in 1993's extensive trials. *This is our last year offering Elisa; grower has discontinued production.* Resistant to PY, TEV and TMV. Tolerant to stip. A=.1g, $1.00, ~14 seeds, B=.2g, $2.00, C=.4g, $4.00, D=1g, $7.00, E=2g, $13.00, K=8g, $45.00.

3930 Valencia (72 days) Its impressive rich orange fruit at maturity will turn heads at potlucks, markets or fair exhibition halls. Valencia bears four-lobed, blocky, 4x4" fruit on plants with good foliage cover. Resistant to TMV and tolerant to stip. A=.1g, $1.00, B=.2g, $2.00, C=.4g, $4.00, D=1g, $7.00, E=2g, $13.00, K=8g, $45.00.

3940 Vidi (72 days) Testimonials from cold climate market growers persuaded us to try Vidi and we were not disappointed. This big beautiful blocky elongated French pepper has shiny dark green thick walls which will reliably turn intense red without deformities. Vidi sets fruit better than others of its class under adverse conditions, and is capable of immense yields in optimal conditions. Compact bush resists breakage while providing good canopy. Resistant to TMV, TEV and PY. A=.1g, $1.00, ~12 seeds, B=.2g, $2.00, C=.4g, $4.00, D=1g, $7.00, E=2g, $13.00, K=8g, $45.00.

3960 Orobelle (74 days) The grower has discontinued production. *Sorry, no longer available.*



3970 Portos (74 days) Also known as Hybrid 860. Who names these varieties, anyway? They couldn't have come up with a less appealing name, but don't be fooled, this is one great pepper! Portos was the star of our 1993 trials, a prolific producer of high quality 4-lobed green bell fruits which turn brilliant yellow at full maturity. Its strong plant cover, yield potential, blocky shape and very thick walls make Portos a standout. A=.1g, $1.00, ~11 seeds, B=.2g, $2.00, C=.4g, $4.00, D=1g, $7.00, E=2g, $13.00, K=8g, $45.00.

3976 Paprika Fire (65 days) Also known as Sugarchile. Exceptionally good for eating out of hand and great for roasting over the grill, Paprika Fire is traditionally used for drying to make hot paprika or chili powder. Its very sweet flavorful red flesh and mildly hot ribs combine to create a delightfully complex and mildly addictive taste sensation. Medium-sized strong plants yield heavy sets of tapering, pointy 1$^1/_2$x5" fruit with thick walls. A=.1g, $1.00, ~16 seeds, B=.2g, $2.00, C=.4g, $4.00, D=1g, $7.00, E=2g, $13.00, K=8g, $45.00.

TOMATOES *Lycopersicon esculentum*

9,000 seeds per oz., .2g pkt ~60 seeds, .5g pkt ~150 seeds. Tender, cannot tolerate frost. Must be started indoors Feb.-Apr. Require warm temperatures to germinate. Avoid using hot manure as it causes lush foliage with few ripe fruits. Instead use generous amounts of well-rotted compost or cow or horse manure to boost plant vigor and yields. Heavy phosphorus needs. Respond well to foliar sprays. Determinate (det) bush varieties may be staked, normally should not be pruned. Indeterminate (ind) climbing varieties are customarily staked and pruned. Caging without pruning delays ripening, reduces fruit size but increases production, prevents sunburn and reduces fruit cracking and rotting. Staking and pruning produces earlier larger fruits. One reason not to stake or prune (besides sheer laziness!) is that foliage will give fruits some protection against light September frosts. Large-fruited varieties with low fruit set and high sugar content are most prone to crack. To reduce cracking: avoid heavy watering, avoid large fluctuations in day/night temperatures and maintain adequate calcium levels in your soil. Research at Harvard University suggests that men who eat at least ten servings per week of tomatoes sharply reduce their risk of prostate cancer and women who consume 2-4 or more servings reduce their risk of breast cancer. Consumption of raw tomatoes is linked to reduced cancers of the esophagus, colon and rectum.

We place a heavy emphasis on diversity in our tomato trials. Most years I grow more than 100 different varieties at Shooting Star Farm (135 in 1998). Our research brought eight additional varieties to our 1998 lineup and four more for 1999. The rich cultural heritage of the many colorful heirlooms speaks for itself. Who could fail to be enchanted with names like Cherokee Purple, Dad's Mug, Box Car Willie, Radiator Charlie's Mortgage Lifter, Prize of the Trials, Dad's Barber, Snowball and Stump of the World? Heirloom tomatoes are entering the mainstream: tasting events are springing up all over the Northeast.

If you insist on unblemished, perfectly round, red tomatoes you're missing out on a rich diversity of shapes, colors, textures and complex subtle flavors. Music teacher and tomato fanatic Amy LeBlanc says that "yellow tomatoes have bad press comparable to and as undeserved as that of viola players in the orchestra." The DiMare Company, one of North America's largest fresh market tomato growers (over 17,000 acres), says that is changing. Yellow tomatoes are becoming staple in the trendier stores and even reaching into mainstream markets. Striped tomatoes may be next.

We select heirloom varieties to amaze and delight home gardeners, but an increasing number of market growers are now testing heirlooms' commercial potential. We suggest offering prospective customers free samples.

For all tomatoes, days to maturity are from date of transplanting.

See also **#6868-6874**.

PHYSALIS

4008 Husk Cherry (77 days) *P. pruinosa* An open-pollinated treat inside every paper wrapper! Also known as Ground Cherry. Same genus as Chinese Lantern and tomatillo, bearing fruits which ripen inside their protective husks. As clusters of berries sweeten, they turn from green to golden yellow, drop off the decorative branching plants as they ripen, and reach perfection as their husks thin to a near-gossamer papery consistency. The berries have an indescribable nutty flavor that kids love for raw snacks. Grown-up kids will often go back for more, too. *Don't eat them green—they can be a powerful emetic.* Culture like tomatoes, transplanting after last spring frost. Husk cherries will tolerate a touch of frost but give up when temperatures dip below 30°. In a good year, about half will ripen in time. Will readily self sow, although volunteers never mature as quickly as those started indoors. Seed grown in Vermont without pesticides, herbicides or chemical fertilizers. A=$^1/_2$g, 80¢, B=1g, $1.50, C=2g, $2.50, D=4g, $4.00. *Not available in size E, order size D.*

4014 Toma Verde Tomatillo (77 days) *P. ixocarpa* Open-pollinated large-fruited uniform strain. Golf ball-sized green fruits encased in papery husks are harvested for making salsa when paper splits. They can be eaten raw for a tangy, nutty taste if allowed to turn slightly yellow, but will split before becoming fully yellow. Heirloom. A=$^1/_2$g, 80¢, B=1g, $1.50, C=2g, $2.50, D=4g, $4.00, E=28g, $6.00.

OPEN-POLLINATED TOMATOES

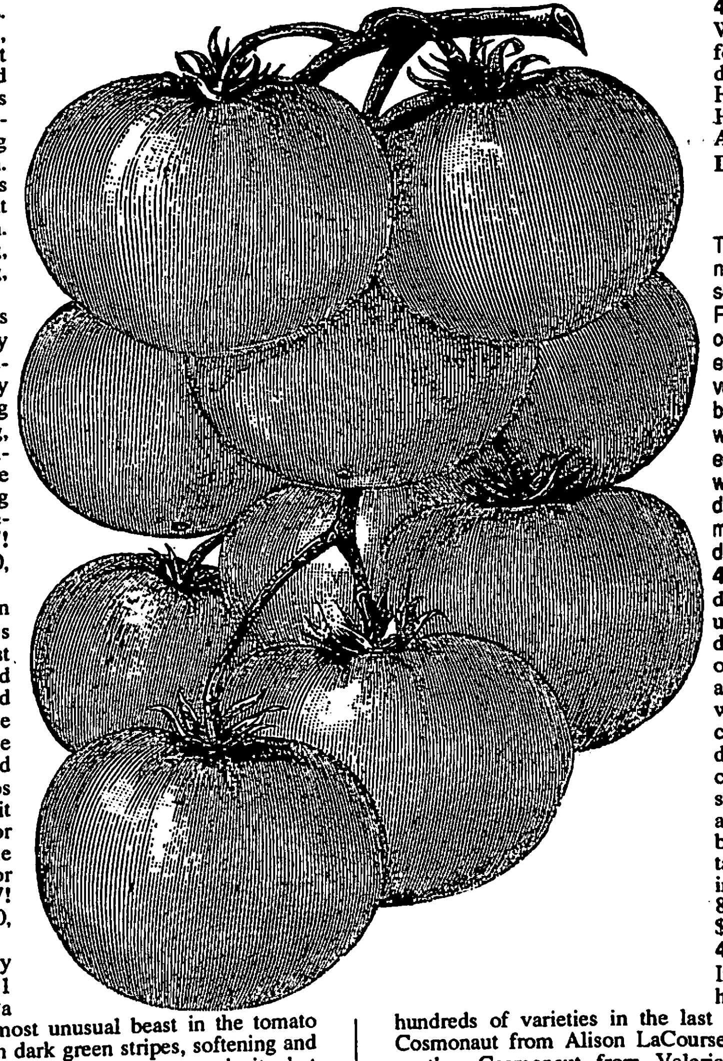
4024 Oregon Spring (58 days) Det. Recommended as a "hedge" in northern climates for cold summers like 1986, 1992 and 1996. When most other varieties fail to ripen in time, Oregon Spring matures good-sized fruit in August, actually performing best during cool summers. Develops more cosmetic defects in the heat and humidity. Bears succulent almost seedless fruits of Russian parentage, up to 4" but somewhat variable. Unusually good tasting for such an early variety. Bred and developed by Dr. James R. Baggett of Oregon State University. Potato-leaf foliage. Not suitable for market growers. Resistant to V. A=$^1/_2$g, 80¢, ~250 seeds, B=1g, $1.50, C=2g, $2.50, D=4g, $4.00, E=28g, $14.00.

4032 Ida Gold (59 days) Det. Often these delightful orange 2-bite low-acid fruits are the first tomatoes to ripen for us. They are early and prolific even in bad tomato years. Developed specially for the North by the University of Idaho. An indifferent performer in so-so soil, but a bountiful yielder when fed compost and rotted manure. A=$^1/_2$g, 80¢, B=1g, $1.50, C=2g, $2.50, D=4g, $4.00. *Not available in size E, order size D.*

4044 Shumway's German Johnson (70 days) Ind. Heirloom tomato experts Carolyn Male, Chuck Wyatt, and Paul Hauser have confirmed that the strain we have been offering as German Johnson is a misnomer—not the Pennsylvania Dutch heirloom which is one of the parents of Mortgage Lifter. Shumway, the original source for our seed stock, acknowledged that the variety they are selling is a potato leaf. True German Johnson does not have a potato leaf. Chuck Wyatt recently sent us seed for the true strain which we will grow alongside Shumway's in our 1999 trial. Shumway's tomato, though historically inauthentic, delivers authentic rich tomato flavor which we have greatly enjoyed since it surprised us in our 1994 trial. Very uniform and attractive for an heirloom variety, the 12-24 oz. slightly oblate low-acid pink fruits start ripening early and keep coming steadily. The interplay of subtle flavors makes for a robust tomato-ey taste. Now if anyone can tell us what we're really enjoying, we'd be extremely grateful. A=$^1/_2$g, 80¢, B=1g, $1.50, C=2g, $2.50, D=4g, $4.00, E=28g, $14.00.

4048 Pruden's Purple (72 days) Ind. We usually cooperate well at Fedco and tolerate each others' peculiarities *except* during tomato taste tests. When we compare tomatoes, a subject about which we are all impassioned, tolerance evaporates and remarks are made about "people who have no taste buds," who "eat yellow tomatoes" and who "put sugar in their sauce." CR thinks you don't need Pruden's if you have Brandywine. Susan and David like Brandywine fine but think Pruden's tastes better and ripens three weeks earlier in hot seasons. Opinions aside, Pruden's is early for its size, and makes a great sandwich tomato. Its vigorous potato-leaf vines yield spreading irregular pink 1 lb. fruit with very few seeds, a silken texture and rich tomato taste, nicely tart with a balanced undertone of sweetness that is neither insipid nor cloying. A=$^1/_2$g, 80¢, B=1g, $1.50, C=2g, $2.50, D=4g, $4.00, E=28g, $14.00.

4054 Bonny Best (75 days) Ind. Bonny Best was developed in 1908 at the Bonny Plant Farm in Union Springs, AL. John Baer, often considered synonymous, was a selection out of a field of Bonny Best in 1915. Maule, in 1935, still distinguished between the two. Our Bonny Best comes from Petoseed. Always one of the richest-tasting in our trials, this old-time canning variety is also fine for the home garden. Too prone to catfacing for market growers and too soft to stand much handling, but great for eating whole right in the garden. Medium-sized deep red globes. A=$^1/_2$g, 80¢, B=1g, $1.50, C=2g, $2.50, D=4g, $4.00, E=28g, $6.00.



4056 Rutgers (75 day) Det. This famous New Jersey tomato was developed by Campbell Soup Co. in 1928 as a cross between Marglobe and JTD, and refined by Rutgers University in 1943. It has long been considered an outstanding slicing, cooking and canning tomato. Medium-sized 5-8 oz. unblemished deep oblate fruits with rich red interior and pleasing texture have that great old time flavor! Resistant to F1, V1, ASC and GLS. NEW! A=$^1/_2$g, 80¢, B=1g, $1.50, C=2g, $2.50, D=4g, $4.00, E=28g, $6.00.

4062 Jubilee (80 days) Ind. Also known as Golden Jubilee. Nikos discovered this one at a Waldo County Extension taste test at Unity College this summer. Actually, I'd had it in the trials several years before and overlooked it despite rating it highly. The best medium-sized open-pollinated orange tomato, Jubilee ripens smooth-textured sweet mild meaty 8 oz. globes. Nikos brought me back one from the tasting and it was superb, on a par with Goldie both for texture and flavor. Smaller and less prone to blemish than Goldie. Won an AAS for Burpee in 1943. Resistant to ASC. NEW! A=$^1/_2$g, 80¢, B=1g, $1.50, C=2g, $2.50, D=4g, $4.00, E=28g, $6.00.

4064 Green Zebra (80 days) Ind. Amy LeBlanc, who offered seedlings for 111 different varieties this spring, called it "a wonderful surprise for us in 1996." A most unusual beast in the tomato menagerie, this zebra starts out green with dark green stripes, softening and blushing yellow when it ripens. It might have remained a mere curiosity, but for its scrumptious sweet rich flavor. 4-5 oz. small-medium fruits are emerald green inside. Perfect exteriors don't crack, hold up under adverse conditions and are strikingly different. Could be a hit with your kids or on your stand. A=$^1/_2$g, 80¢, ~165 seeds, B=1g, $1.50, C=2g, $2.50, D=4g, $4.00, E=28g, $14.00.

4068 Pineapple (85 days) Ind. The striped tomatoes are among my favorites. They have such great names as Hillbilly, Mr. Stripey-Tigerella, Georgia Streak and Pineapple, silky smooth textures and complex, fruity tastes. They tend to be a little funky cosmetically and often grow huge, 1 lb. or more. Pineapple, Amy LeBlanc's favorite salad tomato, is certainly characteristic—and may be the best of the genre. Cut in half, it looks like the interior of a pineapple except with yellow and red marbling. It doesn't taste like a pineapple, though, and not like a typical red tomato, either. Its unique mild low-acid fruity sweetness needs a fruit name all its own. But until I can invent it, I'll just call it the most beautiful tomato of all—at least from the inside. Potato leaf foliage. The original seed stock came from Martha Gottlieb. A=$^1/_2$g, 80¢, B=1g, $1.50, C=2g, $2.50, D=4g, $4.00, E=28g, $14.00.

4070 Tiffen Mennonite (86 days) Ind. Tiffen has many similarities to the more famous Brandywine—potato-leaf foliage, pink skin, and rich, rich old-fashioned tomato taste which has twice drawn raves at tastings at staff annual meetings. The large rough oblate beefsteak fruits (avg. 15 oz.) are a tad bigger and later than Brandywine. For a superb sandwich tomato or a fresh garden snack, heirloom Tiffen is hard to top! A=$^1/_2$g, 80¢, B=1g, $1.50, C=2g, $2.50, D=4g, $4.00, E=28g, $14.00.

4082 Gardener's Delight Cherry (68 days) Ind. Gardener's Delight often ripens just when Whippersnapper is through. Its larger size, deep red color and rich sweet flavor also contrast with Whippersnapper. The large plants need staking and will bear till frost. The fruits are so wonderful that I can overlook their annoying tendency to crack. A=$^1/_2$g, 80¢, ~250 seeds, B=1g, $1.50, C=2g, $2.50, D=4g, $4.00, E=28g, $14.00.

4090 Principe Borghese Cherry (75 days) Vigorous det. Bears small fruits in prolific clusters over a long season. An Italian variety of excellent flavor used for sun-dried tomatoes as it has few seeds and little juice. In our humid climate, you will need a solar dryer or a 100° oven to dry the fruits successfully. Also makes a tasty sauce, although you'll need a lot of the little tomatoes! CSA grower Jill Agnew lauds them for holding their perfect shape so well without cracking. A=$^1/_2$g, 80¢, ~330 seeds, B=1g, $1.50, C=2g, $2.50, D=4g, $4.00, E=28g, $14.00.

4096 Yellow Plum (72 days) Ind. We've nibbled on these meaty little gems for years. Unlike the pear types, they don't crack or succumb easily to disease. Heirloom offered by Indiana seedsman Hirschy for a nickel a packet in 1890. A=$^1/_2$g, 80¢, B=1g, $1.50, C=2g, $2.50, D=4g, $4.00, E=28g, $6.00.

MAINE-GROWN TOMATOES
Open-Pollinated

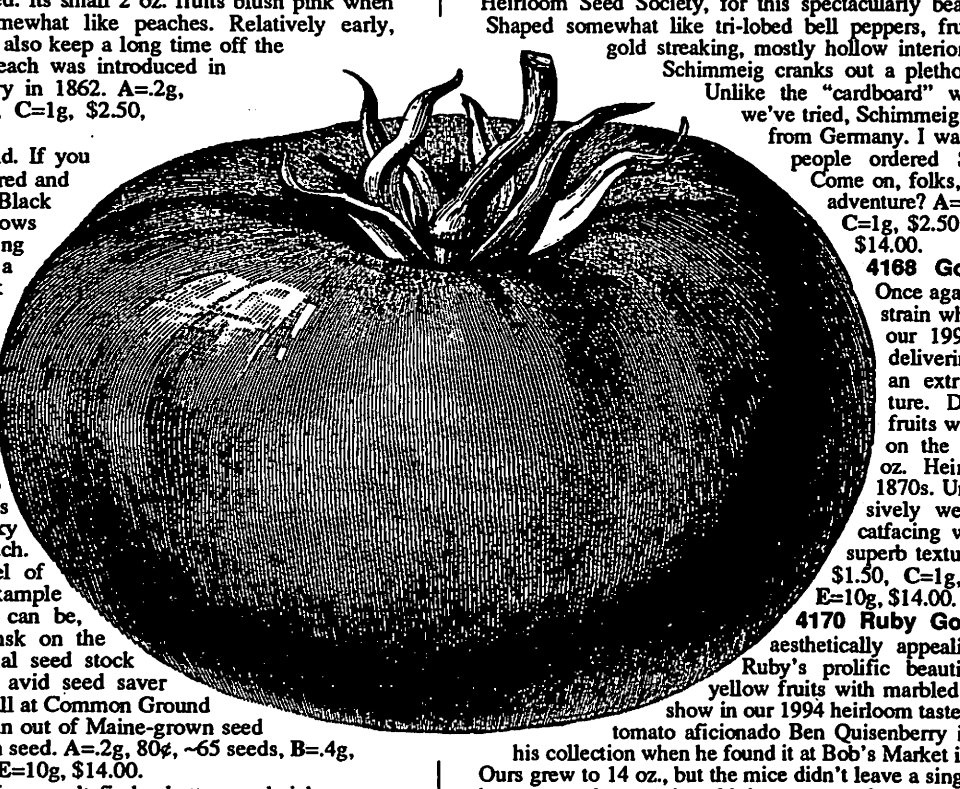
Take the leap and reward yourself with some new tomato experiences! All the seed in this section, except where noted, was grown by Fedco staff and trial growers without the use of pesticides, herbicides or chemical fertilizers. Those who have admired the tomato diversity displays at our Common Ground Fair booth have seen a sampling of our work as well as a sneak preview of where we're headed. All of the seed in this section was treated with a trisodium phosphate rinse (TSP) to reduce risk of seed-borne disease. TSP treatment complies with organic certification standards and poses no health risks.

4106 Glacier (56 days) Det. The Canadian seed company which used to supply us with this popular early small tomato disappeared! So we took control of our own seed production. Glacier ripens around the same time as the sub-arctics with about the same size, and almost no cosmetic defects except yellow shoulders, but there the comparisons end. Glacier's rich tomato flavor relegates the insipid sub-arctics to the compost pile. It is also far superior to the highly touted Siberia tomato, to Stupice, to Early Temptation and, in fact, to every other tomato in the same class that we've tried. A=.2g, 80¢, ~65 seeds, B=.4g, $1.50, C=1g, $2.50, D=2g, $4.00, E=10g, $14.00.

4112 Cosmonaut Volkov (65 days) Ind. How good is Cosmonaut Volkov? I have eaten thousands of fruits from hundreds of varieties in the last five years. My alltime favorite was a Cosmonaut from Alison LaCourse's 1995 trial. My second favorite was another Cosmonaut from Valerie Jackson's 1998 crop. How early is Volkov? Of the first fourteen full-sized ripe tomatoes harvested on or before Aug. 24 in our cold 1996 season, seven came from the two Cosmonauts. The other seven were scattered among three score other full-sized varieties in the trial. What makes Cosmonaut so special? In a word, the juice. Sweet, rich, full-bodied from deep red 8-12 oz. globes. The fruits look good, too, giving Cosmonaut possibilities as a market tomato. Cosmonaut, named for the Russian explorer who fell through space, is the quintessential fresh-eating tomato. Not many will even make it out of the garden to the kitchen. Brought from Russia by the Seed Savers Exchange. *Very short seed crop in 1998, order early. Available in size A only.* A=.2g, 80¢

4120 Sochulak (70 days) Ind. Very heavy early yields of oblate pink fruit with a meaty texture suitable for eating or cooking. Eaten out of hand has the best flavor of any paste tomato. This heirloom, pronounced suh-*coo*-luk, came from Italy to New Jersey three generations ago. Shortly after Ed and Ann Susen moved on to their farm in Lincoln Center, ME, in 1976 they received seed from a New Jersey relative. Ann passed the seed on to her daughter Barb Sochulak, from whom the variety gets its name, who sent a sample seventeen years ago to Roberta Bunker. Over the years Roberta has maintainied it, selecting for earliness and disease resistance. Although still not blemish free, it is a fine choice for home gardeners. Oxheart type grows medium to very large size, quickly fills up the sauce pot. This Fedco Seeds introduction caught on fast with our customers. A=.2g, 80¢, ~80 seeds, B=.4g, $1.50, C=1g, $2.50, D=2g, $4.00, E=10g, $14.00.

4126 Garden Peach (71 days) Ind. Sweet! That's the initial reaction of virtually everyone tasting Garden Peach. The sensation of my 1993 tomato trials, this heirloom is well named. Its small 2 oz. fruits blush pink when ripe and have fuzzy skins somewhat like peaches. Relatively early, prolific, soft-skinned, juicy, they also keep a long time off the vine. Originally from France, Peach was introduced in America by James J. H. Gregory in 1862. A=.2g, 80¢, ~100 seeds, B=.4g, $1.50, C=1g, $2.50, D=2g, $4.00, E=10g, $14.00.



4148 Black Krim (80 days) Ind. If you think a tomato should be round, red and cosmetically perfect, steer clear! Black Krim scales the heights and wallows in the depths: at its best a striking iridescent purple, at its worst a hunk of road-kill. Most Black Krims have dark green-black shoulders with pronounced catfacing. Interiors are part black, too, with an unusual juicy yet meaty taste and texture. They taste best when they are dead ripe, which means blackish-red on the bottom and so soft one can hardly get them from garden to table intact! "My friend Matt says the Black Krim tomato has a smoky flavor like a good single malt scotch. I concur!!," says Andrew Knafel of Shaftsbury, VT. A wonderful example of just how diverse the tomato can be, heirloom Krim hails from Krymsk on the Black Sea in Russia. Our original seed stock came from Martha Gottlieb, the avid seed saver who coordinates the Exhibition Hall at Common Ground Fair. Late in the season we will run out of Maine-grown seed and substitute commercially grown seed. A=.2g, 80¢, ~65 seeds, B=.4g, $1.50, C=1g, $2.50, D=2g, $4.00, E=10g, $14.00.

4150 Soldacki (80 days) Ind. You won't find a better sandwich tomato than Soldacki, a heavy producer of meaty, tasty 14 oz. pink globes with a good mix of sweetness, tartness and real tomato flavor. Tall, vigorous potato-leaf vines. Originally from Krakow, Poland, brought to Cleveland, OH, around 1900, then to Albany, NY. One of Nikos' favorites. Prone to cracking in wet seasons. A=.2g, 80¢, B=.4g, $1.50, C=1g, $2.50, D=2g, $4.00, E=10g, $14.00.

4155 Brandywine (82 days) Ind. with potato-leaf foliage. Meaty with just the perfect hint of tartness, pink Brandywine is the tomato most responsible for the revival of interest in heirlooms. Rose Marie Nichols McGee in Oregon, among the first to appreciate its commercial potential, provided us with our stock seed in 1991 and our sales have since quintupled to over 1,000 packets per year. William Woys Weaver has debunked the myth that Brandywine is an Amish tomato. It was, in fact, introduced in 1889 by Johnson & Stokes, a Philadelphia seed house. Collector Ben Quisenberry considered Brandywine to be the best-tasting tomato. So do I. Brandywine consistently delivers more of that good old-fashioned tomato flavor than any other kind. The oblate beefsteak-type fruits come in right around a pound. Although they ripen unevenly throughout the season, at least a few will be quite early for such a large tomato. We just can't keep it in stock. This year's organic seed crop is again short and will get us about halfway through the season. Thereafter, we will supply commercial seed from Petoseed. A=.2g, 80¢, ~100 seeds, B=.4g, $1.50, C=1g, $2.50, D=2g, $4.00, E=10g, $14.00.

4163 Aunt Ruby's German Green (85 days) Ind. If you think green tomatoes are good only for mincemeat, your first taste of Aunt Ruby's will change your opinion forever. One fan described it as "a phenomenal conversation piece whose tangy bright green gel tastes even better than the conversation it makes." Oblate 12-16 oz. fruits blush lightly yellow and develop an amber-pink tinge on the blossom end when ripe. The green flesh of this beefsteak is faintly marbled with pink. Flavor sweet and tart, rich and spicy. Created a sensation at our staff taste-testing in September, 1996, where it was rated "good" or "excellent" by all who tried it, ranking behind only Brandywine. Aunt Ruby's is not just the best green tomato, it is one of the best of any color. From Ruby Arnold of Greenville, TN. A=.2g, 80¢, B=.4g, $1.50, C=1g, $2.50, D=2g, $4.00, E=10g, $14.00.

4167 Schimmeig Striped Hollow (85 days) Ind. We are indebted to Joe and Bobbi Cavanaugh, avid seed savers and founders of the Garden State Heirloom Seed Society, for this spectacularly beautiful stuffing tomato. Shaped somewhat like tri-lobed bell peppers, fruits red with gorgeous gold streaking, mostly hollow interiors. Once it gets going, Schimmeig cranks out a plethora of 2$^1/_2$-5 oz. fruits. Unlike the "cardboard" walls of other stuffers we've tried, Schimmeig tastes good. Originally from Germany. I was appalled that only 45 people ordered Schimmeig last year. Come on, folks, where's your sense of adventure? A=.2g, 80¢, B=.4g, $1.50, C=1g, $2.50, D=2g, $4.00, E=10g, $14.00.

4168 Goldie (90 days) Ind. Once again we have the original strain which so impressed us in our 1994 and 1995 trials by delivering its rich flavor with an extraordinary velvety texture. Deep orange beefsteak fruits with a little red streaking on the bottom average 16-20 oz. Heirloom dates from the 1870s. Under cold and/or excessively wet conditions prone to catfacing which detracts from its superb texture. A=.2g, 80¢, B=.4g, $1.50, C=1g, $2.50, D=2g, $4.00, E=10g, $14.00.

4170 Ruby Gold (90 days) Ind. As aesthetically appealing as it is delicious, Ruby's prolific beautiful huge red-streaked yellow fruits with marbled interior flesh stole the show in our 1994 heirloom taste test. No wonder famed tomato aficionado Ben Quisenberry included Ruby Gold in his collection when he found it at Bob's Market in Mason, WV, in 1967. Ours grew to 14 oz., but the mice didn't leave a single one unscathed. They know a good one and couldn't stay away from the meaty fruits with superb mild sweet flavor. Fruits, slightly flattened with red spot on skin on the blossom end, seldom cosmetically perfect, prone to radial cracking. *Seed in short supply. Order early.* A=.2g, 80¢, ~100 seeds, B=.4g, $1.50. *Available in sizes A and B only.*

4175 Whippersnapper Cherry (52 days) Det. No other cherry tomato is quite like Whippersnapper. Its pinkish-red tart fruits ripen earlier than any other cherries. Not disease resistant, it should be followed by a later sweeter more vigorous variety. A=.2g, 80¢, ~130 seeds, B=.4g, $1.50, C=1g, $2.50, D=2g, $4.00, E=10g, $14.00.

4177 Ciudad Victoria (64 days) *L. e.* var. *pimpinellifolium* Ind. Frankly, until I met Ciudad, the recent rage for currant tomatoes left me cold. All the ones I tried cracked at the drop of a dewdrop! Their tiny bland fruits just weren't worth the trouble. Ciudad is different, with larger fruits than other currants. Ciudads bolster the fruity wildness of the currants with some solid tomato taste, sweet with acidity, seedy, rich, good. The fruits do not crack *ever*, not on the vine, not after picking, not even after a heavy rain. Long rambling 3-5' vines bear red orange $^1/_3$-$^1/_2$" berrylike fruit in clusters of 9-13. With Ciudad, Fedco is finally "au courant." Actually, Ciudad originated in northern Mexico a long time ago. Weaver considers it the most common type of cherry tomato grown in the United States before 1865. A=.2g, 80¢, B=.4g, $1.50, C=1g, $2.50, D=2g, $4.00. *Not available in size E, order size D.*

4184 Heinz 2653 (68 days) Det. An amazingly early red plum type which often ripens all its 2$^1/_2$-3 oz. fruits before frost. Firm fruits for cooking, on compact plants. Heavy yields early. A=.2g, 80¢, B=.4g, $1.50, C=1g, $2.50, D=2g, $4.00, E=10g, $14.00.

4190 Grandma Mary's (68 days) *Crop failure, regret not available in 1999. We hope to have back in 2000.*

4194 Bellstar (74 days) Det. Bred at Smithfield Experiment Farm in Ontario and introduced in 1981. Red 4 oz. round paste tomatoes are much larger than most others of this type. Delicious flavor is also good in salads. Ripening is spread over a long season. Two lots of seed this season, the larger was grown by Johnny's Selected Seeds at Albion, ME, without pesticides, herbicides or chemical fertilizers. A=.2g, 80¢ B=.4g, $1.50, C=1g, $2.50, D=2g, $4.00, E=10g, $14.00.

Ben Quisenberry

When he died at age 99, Ben Quisenberry (1887-1986) was the oldest active seedsman in the country. At 95 he told a television interviewer that his secret for keeping happy was to do something worthwhile. Quisenberry's life certainly epitomized his own advice: "Make your hobby your business." He assembled a collection of tomato varieties that has assumed the status of a legend and for years sold tomato seeds from his Big Tomato Gardens in Syracuse, Ohio.

Quisenberry still maintained 32 varieties until an extended hospitalization caused him to lose all but 9 in 1980. Members of the Seed Savers Exchange recovered all 23 of his lost varieties, including Tasty Evergreen, Long Keeper, Stump of the World, Tomango, Tiger Tom, Large Red Cherry, San Marzano, Goldie (**#4168** in our catalog) and White Tomato.

Other Quisenberry tomatoes include Big Ben, Dad's Mug, White Beauty, Gold Medal (a bicolored yellow and red), Long Tom ("a dandy salad tomato") Golden Sunray, Ruby Gold (**#4170**), Mortgage Lifter and Brandywine (**#4155**) which he called "as fine a tasting tomato as ever was raised."

Quisenberry once mused about how fortunate he was to be growing old in a rural district where he could be out working with nature making things grow. But we are the truly fortunate ones for what Quisenberry left us.

4196 Amish Paste (85 days) Ind. 37 seed savers can't be wrong! That's how many listed Amish Paste in the 1997 Seed Savers Yearbook, making it one of the most popular items in the Exchange. Their comments tell it all, "the ultimate sauce type," "meaty, few seeds, good for eating fresh or making sauce," "juicy and extremely sweet...absolutely the best paste tomato ever grown in our garden," "canner, good producer, outstanding this year," "heart shaped fruits with very good flavor," "good enough to inspire me to finally try to re-offer some seeds via SSE," and "never fails me." Prolific producer of oxheart fruits up to 8 oz. In our sauce tests had a good creamy texture and nice balance of acids and sweetness, always ranking near the top in comparisons. Thick bright-red sweet flesh. Larger and better than Roma. Wisconsin heirloom. Seed organically grown. NEW! A=.2g, 80¢ B=.4g, $1.50, C=1g, $2.50, D=2g, $4.00, E=10g, $14.00.

4197 Hog Heart Paste (86 days) Ind. Hog Heart has won many fans since Susan Eastman and Ed Lacy of Gray, ME, brought it to the Exhibition Hall at the 1988 Common Ground Fair. They got it from a woman in northern Massachusetts who got it from a man who had immigrated from Italy, probably between 1910 and 1920. So-named because of its tendency to produce double fruits, Hog Heart is a meaty 6-8 oz. paste tomato shaped like a banana pepper, noted for its sparse seed cavity, good solids and excellent flavor fresh, canned or frozen. Although some fruits catface, the folks at Snake Root Farm have had good success selling it at the Orono and Pittsfield farmers markets. Martha Gottlieb was instrumental in distributing seed samples and provoking interest all around the state. It is late for extreme northern areas. A Fedco introduction. NEW! A=.2g, 80¢ B=.4g, $1.50, C=1g, $2.50, D=2g, $4.00, E=10g, $14.00.

4198 Blue Beech Paste (90 days) Ind. This superb large elongated paste tomato won our tomato sauce taste test in 1997, besting several well-known varieties. We received seed from Annette Smith of Blue Beech Farm in Danby, VT, and have named the variety in honor of her farm. Smith got the tomato from her neighbor's niece's uncle who brought it to Vermont from Italy during World War II. This Roma type has been acclimated in Vermont for the last 50 years so it is much more adaptable to cold climates than Roma. It makes a richly-textured sweet sauce that's just brimming with flavor. Fruits, averaging 6-8 oz, often have green shoulders. Needs long season to ripen. A Fedco introduction. NEW! *We have a very short crop for this first year. Available in Size A only, limit one packet per individual please.* A=.2g, 80¢.

4199 Heirloom Tomato Mix You'd love to be adventurous and try them all but you haven't space for that many tomato plants? Or can't make up your mind which ones to select? Here's the solution: Skip the fuss and leave the choosing to us! We'll mix together a bunch of varieties in one packet. You'll get different colors, sizes, shapes and flavors. All you'll need is an open mind, a good sense of observation, unjaded taste buds and acute deductive faculties. Then you can figure out which ones you like and order them by name next year. A=.2g, 80¢, B=.4g, $1.50, C=1g, $2.50, D=2g, $4.00, E=10g, $14.00.

HYBRID TOMATOES

4205 Early Girl (60 days) Ind. Long the standard of comparison for early commercial slicing tomatoes, Early Girl delivers heavy yields of slightly flattened bright crimson globes averaging 4-6 oz. Its firm texture, blemish-resistant skin and long production period make it ideal for market Good flavor for such an early tomato—sweet, meaty with a hint of tartness. A=.2g, $1.20, B=.4g, $2.00, C=1g, $4.00, D=2g, $7.00, E=4g, $12.00.

4210 Early Cascade (66 days) Ind. Always very impressive. Begins producing 4 oz. fruits very early, and keeps on till frost and beyond. Has delicious taste despite exceedingly firm thick skin. Holds quality on vine a long time. Disease resistance includes V1, ASC and S. Needs staking. A favorite market variety. A=.2g, $1.20, ~100 seeds, B=.4g, $2.00, C=1g, $4.00, D=2g, $7.00, E=4g, $12.00.

4218 Enchantment (68 days) Ind. Egg-shaped pointed fruits, called "saladette" in the supermarket, look like paste tomatoes but more suitable for eating in salads or out of hand than for processing. Multiple disease resistance includes F1, F2, V1, N and BS. Jim Waltrip, our Petoseed sales rep, once rated Enchantment as the best-tasting tomato. While I wouldn't go that far, I believe it is one of the most underrated varieties on our list. And it is very early and prolific. One customer reported that the fruits brought inside nearly all ripened and were still good into November. A=.2g, $1.20, B=.4g, $2.00, C=1g, $4.00, D=2g, $7.00, E=4g, $12.00.

4228 First Lady II (70 days) Ind. First Lady II boasts good-tasting round 4-5 oz. fruits bred for the home garden which color early, and keep coming all season. Excellent disease resistance to V, F1, ASC, S and N. A=.2g, $1.20, B=.4g, $2.00, C=1g, $4.00, D=2g, $7.00, E=4g, $12.00.

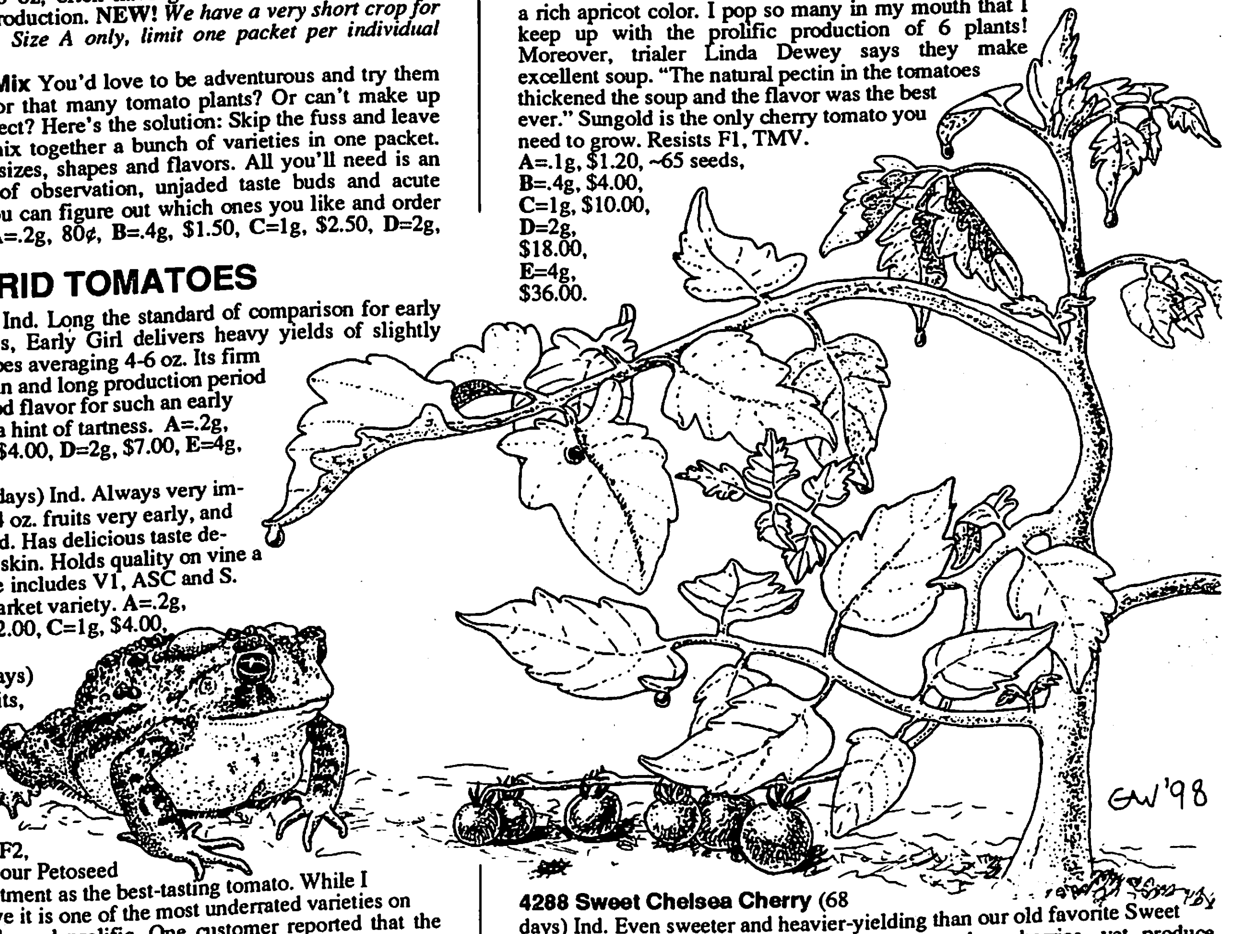
4242 Firebird (71 days) Ind. If you're not familiar with pink tomatoes, Firebird is a great one to try. Its enthusiastic fans, including my neighbor Ellen Paul, think it is the only tomato you need to grow. Jeanne Griffin liked it better than Brandywine. Skin is sweet. Always among the best early pink tomatoes in our trials, Firebird sets 6-8 oz. globe-shaped almost blemish-free fruits with a deep, rich flavor which will send you back for more. Resistant to TMV, F, V, SEPT. A=.2g, $1.20, B=.4g, $2.00, C=1g, $4.00, D=2g, $7.00, E=4g, $12.00.

4260 Big Beef (75 days) Ind. Many beefsteak varieties are ugly, oversized, mealy balls of fluff. But Big Beef answers my beef about beefsteaks because it looks great and actually tastes like a tomato. Moreover, it is a real workhorse producer of 10 oz. spotless fruits which start ripening early and keep coming till frost. This large vigorous plant should please both market growers and home gardeners and it certainly pleased the judges who made it a 1994 AAS. Big Beef's bred-in resistance to V, F1, F2, ASC, S, N and TMV helps its sustained performance. Big Beef was such a success for its breeders at Petoseed that they grew enough seed to fill almost 3 million packets in 1995! A=.2g, $1.20, B=.4g, $2.00, C=1g, $4.00, D=2g, $7.00, E=4g, $12.00.

4268 Celebrity (78 days) Det. 1983 AAS from Petoseed deserved award for its impressive seedling vigor and its flavorful, firm 7 oz. fruits. Wide disease resistance includes V1, F1 and 2, ASC, N, S, and TMV. Best-looking tomato seedlings I've ever raised. A favorite of both home gardeners and commercial growers. A=.2g, $1.20, ~66 seeds, B=.4g, $2.00, C=1g, $4.00, D=2g, $7.00, E=4g, $12.00.

4275 Golden Boy (88 days) Ind. Golden Boy has convinced more than a few that a tomato doesn't have to be red to be good. Not just good, Golden Boy was at or near the top of each of our tomato taste tests until we discovered the heirlooms. The deep color and rich flavor of its 8-10 oz. golden yellow fruits makes all those lemon-yellow tomatoes bland by comparison. Because GB's fruits usually develop blemishes if allowed to fully vine-ripen, we recommend picking them slightly underripe and allowing them to finish in the kitchen. Why hail a Taxi when you can get so much more mileage out of a Golden Boy? Tolerant to ASC. A=.2g, $1.20, B=.4g, $2.00, C=1g, $4.00, D=2g, $7.00, E=4g, $12.00.

4282 Sun Gold Cherry (57 days) Ind. To quote one of our customers, "Without these little babies, there's *no summer*." Sun Gold is the best cherry tomato ever developed, a perfect combination of deep sweetness with a hint of acid tartness. Its small fruits, borne in prolific clusters, ripen very early to a rich apricot color. I pop so many in my mouth that I keep up with the prolific production of 6 plants! Moreover, trialer Linda Dewey says they make excellent soup. "The natural pectin in the tomatoes thickened the soup and the flavor was the best ever." Sungold is the only cherry tomato you need to grow. Resists F1, TMV. A=.1g, $1.20, ~65 seeds, B=.4g, $4.00, C=1g, $10.00, D=2g, $18.00, E=4g, $36.00.



4288 Sweet Chelsea Cherry (68 days) Ind. Even sweeter and heavier-yielding than our old favorite Sweet Cherry. Round fruits are larger than most other cherries, yet produce luscious fruit of almost impeccable appearance relatively early and throughout the season. Wide disease resistance, including TMV and F. A=.2g, $1.20, B=.4g, $2.00, C=1g, $4.00, D=2g, $7.00, E=4g, $12.00.

4296 Super Sweet 100 Cherry (78 days) Ind. Like Sweet 100, only with more disease resistance. Very popular hybrid cherry tomato ripens clusters of 1" round sweet fruits. Should be staked. I like it the best of all the red cherries. Will split in rainy conditions. Resistant to V and F1. A=.2g, $1.20, ~130 seeds, B=.4g, $2.00, C=1g, $5.00, D=2g, $10.00, E=4g, $20.00.

Prices for all culinary and medicinal herbs:
A=70¢, B=$2.00, C=$5.00, D=$12.00

Seeds per packet for herbs are approximate. They are intended as guides, not guarantees, because we pack by weight, not by count. **Available in four sizes except where noted. Weights for each size are listed after each item; prices are in a box at the top of each page.**

Some herbs are customarily grown from divisions or cuttings because they cannot come true from seed, such as French tarragon (available from our Trees catalog), scented thymes and flavored mints; or require fall sowing of fresh seed, such as sweet cicely and angelica.

A botanical index appears on p. 48.

CULINARY HERBS

We divide our herbs into two sections: culinary and medicinal. Several listed in the culinary section also have healing uses (Mint, Rosemary, Sage) and many others owe their traditional culinary use to digestive or preservative properties.

4406 Anise *Pimpinella anisum* Annual bears seeds with subtle licorice overtones and a spicy warming flavor. Drunk as a tea in the Middle East. Crush seeds to release full flavor. Used in baking, an essential ingredient in our Springerle. Like many other culinary seeds, Anise helps ease indigestion, gas and colic, as well as relaxing dry tight coughs. Culture like dill, direct sowing in spring. Sets small white umbel flowers in July which ripen their seed in August and September. 1-3' tall. Germinates in 20-28 days. A=.5 gram, ~100 seeds, B=2g, C=8g, D=40g. 5,600 seeds/oz.

BASIL *Ocimum basilicum*

Indispensable culinary herb has been in cultivation for more than 3,000 years. Direct seed when soil warms in late spring or transplant after danger of frost. Germinates in 6-10 days. Young seedlings heavily watered in cool cloudy conditions are vulnerable to damping off. Water sparingly at first. Use row covers to enhance early season vigor and speed maturity. Requires full sun, gets spindly in shade. Harvest before plants blossom. Except where otherwise indicated, all of our basil seed has been tested for fusarium and the sample tested found to be fusarium-free. Such a result, while not guaranteeing the entire lot is fusarium-free, improves your odds. See also **#4728 & 6876.**

4414 Sweet The heaviest-yielding variety, recommended for drying, all-around great eating, and large-scale pesto production. Our best-selling herb, almost 2,500 packets last season. A=4g, ~2,400 seeds, B=28g, C=112g, D=336g. 17,750 seeds/oz.

4418 Genovese The choice of many connoisseurs for making pesto. Also called Perfumed Basil. Leaves are slightly smaller and finer than Sweet Basil with more aroma and potency. "Talk about prolific and tasty, and it took transplanting really well," says Susan MacLeod of NOFA-NH. A=2g, ~1,450 seeds, B=10g, C=40g, D=200g. 20,500 seeds/oz.

4422 Mammoth This lettuce-leaf type has very large ruffled leaves especially suitable for drying or stuffing. Flavor similar to sweet basil. A=1g, ~600 seeds, B=7g, C=28g, D=84g. 17,000 seeds/oz.

4430 Spicy Bush *O. b. minimum* This marvelous little basil grows to about 8" and maintains a compact mound of light green leaves and white flowers. Its leaves are small, thin and strongly scented. Great as an ornamental border, in a windowbox, or as an indoor potted plant which can be snipped for culinary use. *Not tested for fusarium.* A=.5g, ~420 seeds, B=5g, C=15g, D=60g. 24,000 seeds/oz.

4436 Anise Originally from Persia. Vigorous mulberry-tinted basil with anise fragrance makes highly decorative, tall, bushy plant. Slow to bolt. Great in Italian tomato sauces. Also used in Thai and various Mediterranean cuisines. *Not tested for fusarium.* A=.5g, ~330 seeds, B=7g, C=28g, D=84g. 18,800 seeds/oz.

4442 Cinnamon Similar vigorous growth habit to anise basil, but with a purplish veining on its leaves, and a distinctive cinnamon scent. Use in Middle Eastern or Greek cuisine. *Not tested for fusarium.* A=.5g, ~300 seeds, B=4g, C=16g, D=48g. 17,000 seeds/oz.

4448 Lemon *O.b. citriodorum* Basil often used in bouquets for its intense lemon fragrance. Not as vigorous as Sweet Dani and more vulnerable to blight, but with a stronger truer lemon flavor. Great in fish dishes. Native to Thailand and Southeast Asia and featured in their cuisine. *Not tested for fusarium.* A=.5g, ~375 seeds, B=4g, C=16g, D=48g. 21,000 seeds/oz.

4449 Sweet Dani Lemon 1998 AAS for its extraordinary vigor which manifests even in the seedling stage and continues through the summer. Tall upright plant reaching almost 30" is 2-3 times as vigorous as our other lemon basil, translating into much heavier yields of the large light green leaves without the necessity of extra coddling. We didn't find it quite as lemony as standard lemon basil. NEW! A=.5g, B=1.5g, C=4.5g, D=13.5g.

4456 Red Rubin Growers have found it to be more vigorous than Purple Ruffles. Highly ornamental dark purplish-bronze foliage. The green leaf throwbacks have been mostly bred out of this improved strain. A salad of red basil leaves and yellow tomatoes is stunning for its color contrast. A=.5g, ~375 seeds, B=2g, C=10g, D=30g. 21,000 seeds/oz.

4462 Purple Ruffles Deep purple plants with serrated and crinkled leaves for striking visual contrast in the herb garden. Not a vigorous grower in our climate but will reach a height of 18" in the heat of summer. AAS. A=.5g, ~350 seeds, B=1.5g, C=6g, D=18g. 19,750 seeds/oz.

4506 Chervil *Anthriscus cerefolium* Greek nobles referred to it as *khairephyllon*, or "leaf of joy," and carried sprigs to bless their friends. Superior European strain of this annual grows vigorously and is slow to bolt. Delicate lacy leaves with distinct flavor good in soups, with fish or asparagus. Essential ingredient in mesclun. Direct seed before a rain in early spring or summer. Leaves are ready to harvest 6-8 weeks after sowing. In warmer locations performs best as a fall crop. A=1g, ~440 seeds, B=28g, C=112g, D=448g. 12,500 seeds/oz.

4512 Chives *Allium schoenoprasum* Hardy perennial. 1-3' hollow grasslike leaves enhance any dish with their subtle onion flavor. Lilac-colored flowers bloom in June and July, lovely in arrangements fresh or dried, also can be eaten. Needs sun and well-drained soil. Seeds may be sown in fall or spring, clumps can be divided every other year for best production. Can be brought inside for the winter. Zones 3-9. A=.5g, ~450 seeds, B=7g, C=28g, D=112g. 26,000 seeds/oz.

4518 Cilantro *Coriandrum sativum* Seeds were found in King Tut's tomb and discussed in ancient Sanskrit texts. Useful for its fresh green foliage, its dried seeds (coriander) and its edible flowers. This strain does not bolt as readily as those intended for seed production. Produces leaves in generous quantity which are an essential flavoring in Indian, Chinese, Southeast Asian, North African and Latin American cooking. Although some people do not care for its odor, it accentuates soups, salsas and bean dishes like no other herb. Annual grows to 2' with rosy lavender blooms. Sow in spring; will not stand transplanting. Make succession plantings and keep watered for lustiest leaf production. In warm locations will stand longest as a fall crop. Thin early. Will self sow. Our second most popular herb, we sold more than 1,900 packets. A=2g, ~120 seeds, B=28g, C=112g, D=448g, $8.00. 1,700 seeds/oz.

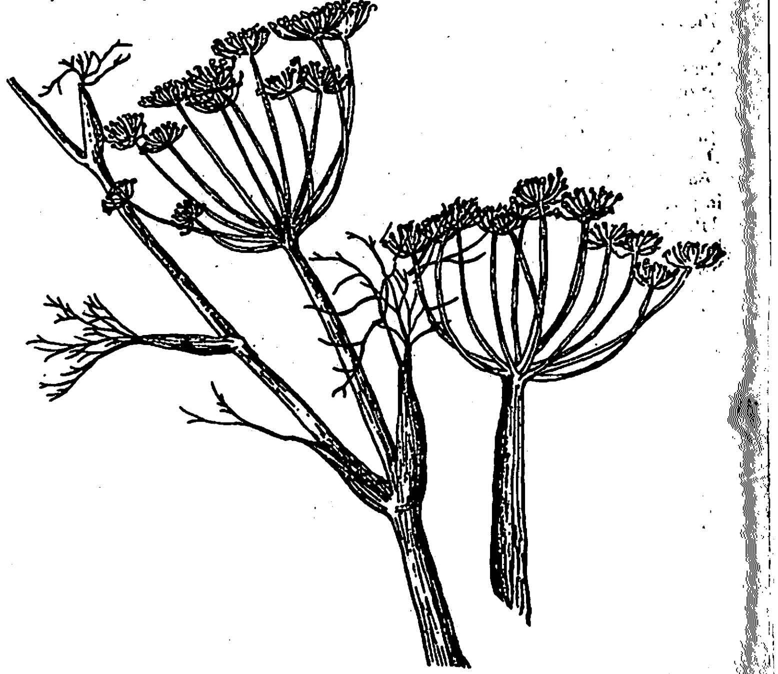
DILL *Anethum graveolens*

Name derived from the Norse dilla, meaning to lull, as the plant is said to have soothing properties. Charlemagne used dill oil at banquets to stop hiccups and belching among his guests. The Puritans used dill seed to keep their stomachs from grumbling during long church services. Best known in this country for pickling, but essential for Russian, Polish and Hungarian cuisine. Annual, sometimes classed as biennial, grows to 4'. Upright plant branches out from single stalk; the feathery leaves known as dill weed. Likes full sun, well-drained soil. Direct seed in spring. Will self sow.

4530 Bouquet Bouquet is usually grown for dill weed production because its leaves are sweeter and more refined than those of Mammoth. Foliage should be harvested early, before seed stalks mature. Growers will like its performance in packs. A=4g, ~2,800 seeds, B=28g, C=224g, D=448g, $6.00. 20,000 seeds/oz.

4536 Fernleaf 1992 AAS. A dwarf variety suitable for small gardens or patio containers, Fernleaf grows only half as tall as other varieties and is very slow to go to seed. As of September, most of our May planting had not yet bolted, and its abundant, piquant foliage was still suitable for harvesting. Multibranching plants spread 18-24". A=.5 gram, ~470 seeds, B=2g, C=10g, D=30g. 26,500 seeds/oz.

4542 Mammoth Variety generally grown for its seeds. Can also be used as dill weed, but the foliage is slightly darker, coarser and stronger-tasting than that of Bouquet. Otherwise, differences between the two in plant height and habit are very subtle. A=4g, ~2,800 seed, B=28g, C=224g, D=448g, $6.00. 20,000 seeds/oz.



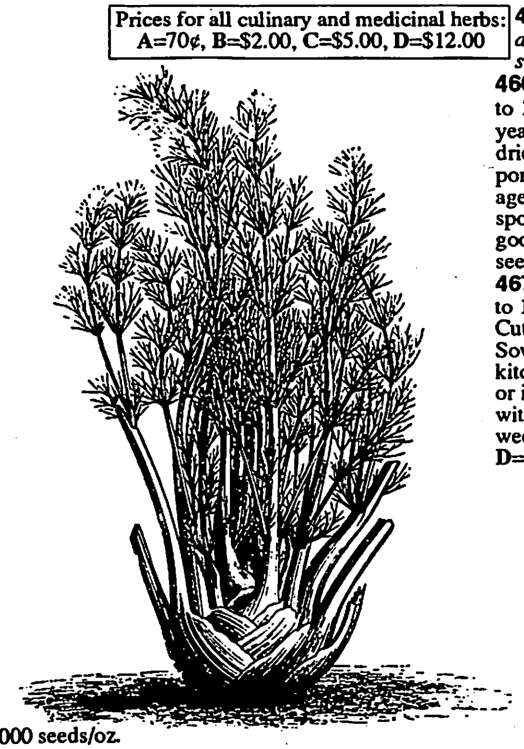
Prices for all culinary and medicinal herbs:
A=70¢, B=$2.00, C=$5.00, D=$12.00

FENNEL *Fœniculum vulgare*

Genus gets its name from the Latin for hay, referring to the smell of the foliage. Perennial grown as an annual with a rich licoricey taste. Tender stalks and leaves are good for relishes, salads, and garden munches; leaves & seeds excellent with fish. Seeds used in sweets, baked goods & beverages. Direct sow in spring when soil warms, in full sun. Keep row moist for good germination.

4556 Zefa Fino Bulbing type. 3' with edible blue-green stems and feathery green leaves. This strain, bred at the Swiss Federal Research Station, is very slow bolting. A spring planting will stand almost all summer. A=.5g, ~125 seeds, B=3g, C=9g, D=27g. 7,000 seeds/oz.

4566 Bronze Slow grower with very thin stems is appreciated for its striking feathery bronze foliage. Decorative and delicious. An intriguing addition to mesclun. Sow in spring; likes moisture. Seed grown without chemical fertilizers or pesticides. A=.2g, ~60 seeds, B=.6g, C=3g, D=15g. 8,000 seeds/oz.



4576 Garlic Chives *Allium tuberosum* Also known as Chinese chives or Chinese leeks. 1' chive-like herb tastes like garlic and can be used as garlic substitute in salads and sautéed vegetables. White flowers may be eaten or used in dried arrangements. Sow thinly in spring, harvest sparingly till plants are vigorous. Perennial, but protect in cold areas. Easier to bring indoors for winter than chives. A=.5g, ~105 seeds, B=14g, C=56g, D=224g. 6,000 seeds/oz.

4592 Lovage *Levisticum officinale* Leaves have a strong celery taste, and are used to flavor soups, stews and casseroles. Second-year plants are best for drying. Formerly used to mask the bitter herbs in medicinal concoctions. Has been used as a love charm. Umbelliferous perennial grows 3-6'. Likes good soil and shady, moist areas. Can be direct seeded in late summer or early fall. A=.5g, ~145 seeds, B=4g, C=28g, D=84g. 7,800 seeds/oz.

4616 Sweet Marjoram *Origanum majorana* Grown as an annual in the North. 1' plant with grey-green rounded leaves of enchanting sweet fragrance. Cut often to prevent flowering. Use fresh or dried. Seeds are slow to germinate, take 1-2 weeks. Sow indoors in the spring and transplant 8" apart in well-drained soil. Subject to damping off; do not overwater. Likes full sun. A=1g, ~6,000 seeds, B=7g, C=28g, D=112g. 169,600 seeds/oz.

4624 Green Magic Mexican Tea *Chenopodium botrys* In our search for the best epazote we found this close relative which we prefer to the better-known herb *(C. ambrosioides)* because it is milder in flavor and more ornamental, yet has much the same uses in Mexican bean dishes and sauces. Its foliage, though oakleaf-shaped rather than serrated, still emits the pleasing pungent aroma characteristic of epazote. Thrives in rich soil and full sun, growing up to waist high. Same genus as lamb's quarters and quinoa. Annual, will self sow. A=.1 g, ~500 seed, B=.3g, C=3g, D=15g. 140,000 seeds/oz.

4632 Common Mint *Mentha spicata* Don't count on specific types of mint to come true from seed. This is the common tea mint. Start indoors and transplant after danger of frost or direct seed in early fall. Needs light to germinate. Can be grown directly in pots indoors in winter. Keeping it in containers will prevent it from spreading out of hand. Likes moist soil, full sun or partial shade. Perennial to Zone 4. A=.1g, ~1,200 seeds, B=1g, C=3g, D=9g. 341,000 seeds/oz.

4646 Greek Oregano *Origanum heracleoticum* This is the oregano to use in pizzas and other Mediterranean dishes. Low-growing plant with fragrant dull green and purple leaves and white flowers. Start indoors in spring for best results. Likes full sun and light well-drained not very rich soils. Will lose potency if soil is overfed. Hardy to Zone 4 with winter protection. Can survive a few years in Zone 3, but the open winter of 1996-7 was a killer. A=.05g, ~500 seeds, B=.15g, C=.6g, D=3g. 301,000 seeds per oz.

4656 Rosemary *Rosmarinus officinalis. Regret not available. Over-harvesting in the wild has depleted seed supplies.*

4664 Broadleaf Sage *Salvia officinalis* Hardy perennial to Zone 4; will grow in Zone 3 but winterkill every few years. Grows up to 3', with blue flowers. Used fresh or dried. Tasty in stuffing blends, with eggs, cheese, poultry, pork. Grey oblong leaves on stems which grow woody with age; plants should be replaced every 3 years. Likes sunny spot, well-drained soil. May be sown in early spring for a good fall crop. Takes 2-3 weeks to germinate. A=1g, ~125 seeds, B=7g, C=28g, D=84g. 3,450 seeds/oz.

4672 Summer Savory *Satureja hortensis* Annual grows to 1½' with narrow dark-green leaves and lavender flowers. Cut often during growing season, before blossoms appear. Sow in spring next to beans, their complement in the kitchen as well. Use with dry or green beans, rice, stuffings, or in onion soup. Left to bloom, it becomes beautiful in fall with dark purple foliage and lavender flowers. Takes 2-3 weeks to germinate. A=1g, ~1,800 seeds, B=14g, C=56g, D=224g. 51,500 seeds/oz.

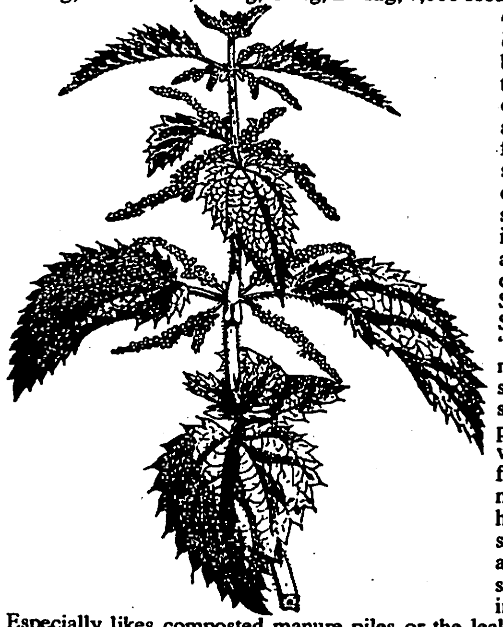
4680 Red Shiso *Perilla frutescens* Annual also known as perilla. Introduced from Japan in the 1850s. Its extremely ornamental purplish-red cinnamon-scented leaves are used in Japanese cuisine in sushi, sweet and sour sauces, and stir-fry. Grows up to 4'. To break dormancy, freeze and thaw the seed several times over a 21-45 day period. Soak seed several days or until they sprout. Move to indoor flats, and transplant into warm soil. Absolutely intolerant of frost. A=.5g, ~600 seeds, B=7g, C=28g, D=84g. 33,900 seeds/oz.

4686 German Thyme *Thymus vulgaris* Creeping low-matted perennial to 12" requiring good drainage and at least half day of sun. Brings depth of flavor to soups, gravies, casseroles. Likes alkaline soil. Seeds take 3-4 weeks to germinate; broadcast thickly. Its fine root system makes thyme difficult to move around the garden. Said to calm the nerves, soothe headaches. A=.2g, ~700 seeds, B=7g, C=28g, D=84g. 98,200 seeds/oz.

4694 Watercress *Nasturtium officinale* Hardy perennial native to Europe. Seeds may be started indoors and transplanted to cold frame; keep watered. Seeds may also be direct sown in soggy stream bank. Likes sunshine. Keep picked; it gets bitter if flowers are allowed to form. Use in salads and soups; rich in vitamins and minerals. A=.25g, ~1,375 seeds, B=1g, C=14g, D=42g. 155,400 seeds/oz.

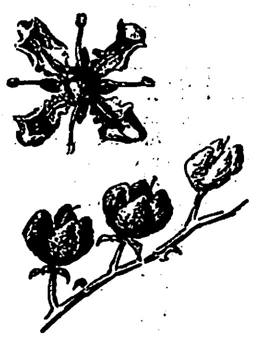
Prices for all culinary and medicinal herbs:
A=70¢, B=$2.00, C=$5.00, D=$12.00

4900 Great Mullein *Verbascum thapsus* Has definitely been great for me, serving as my introduction to herbs when I had a bad bout of bronchitis that allopathic medicine couldn't touch. Soft and fuzzy grey-green Mullein leaves, with their mucilaginous properties that soothe and lubricate tissue, did the trick, and I've had it in my household medicine chest for respiratory ailments ever since. Mullein flowers, infused in oil, are used externally for such common problems as earache, hemorrhoids, chilblain and rheumatism. A stately biennial, mullein sends up a tall dramatic spike of small yellow flowers after the leaves form a rosette the first year. Once common along Maine's roadsides, mullein has become noticeably less abundant. Gardeners can take up the slack by domesticating this striking ornamental. Stratify seed; needs light to germinate; takes up to 3 weeks. Favors well-drained poor soil, full sun. May be direct seeded spring or fall or started indoors. Zone 3. NEW! A=.1g, ~700 seeds, B=.4g, C=4g, D=12g, 7,000 seeds/g.



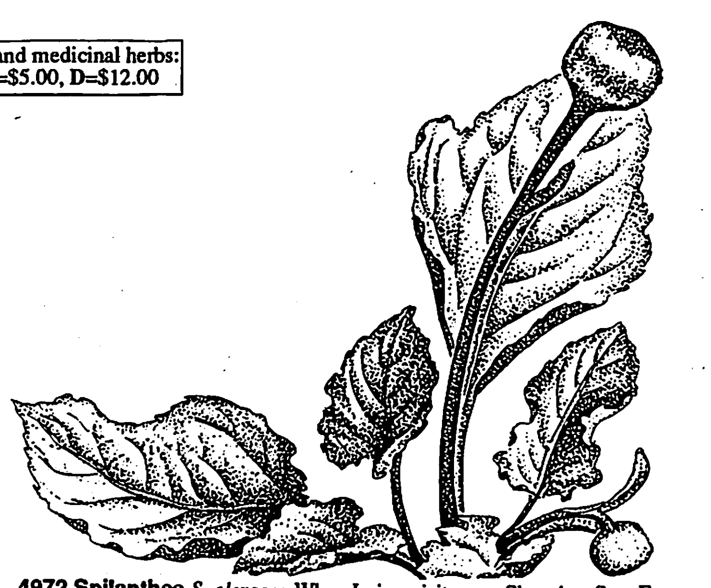
4908 Stinging Nettle *Urtica dioica* Used by biodynamic gardeners to increase the potency of neighboring herbs, and to stimulate humus formation. Young shoots and leaves are delicious steamed as spring greens, very high in minerals. Also makes a great hair rinse or dry chicken feed. Barbara Sempf, who gardens in St Albans, VT, reports, "The stinging nettle makes a wonderfully stinky nettle tea. Great stuff and not at all appreciated by the ladies who judge at our local field days. Alas." Perennial may spread if not harvested. Choose your spot carefully; the roots as well as the leaves can sting. Cooking or drying removes the sting. Especially likes composted manure piles or the leaky side of your lushest compost bin. Germinates 10-14 days, grows 3-6'. Hardy to Zone 2. Seed collected from wild Maine compost piles. A=.2g, ~1,240 seeds, B=.6g, C=2.4g, D=7.2g. 175,000 seeds/oz.

4924 Pennyroyal *Mentha pulegium* Hardy groundcover plant is notorious for its insect-repellent properties and can be used to ward off mosquitoes and to repel fleas from pets. Strongly aromatic member of the mint family makes a potent tea. Pennyroyal's distilled oil is toxic, but the tea rinse is safe for external use. *Caution: Should not be used by pregnant women.* Start indoors at cool temperatures and keep moist. Taking two weeks to germinate, the seedlings are small and grow slowly. Plant 6" apart to make a dense mat. The plants creep with only the lavender flower stalks rising above the ground. Perennial likes rich soil with good moisture; can tolerate shade. A=.1 gram, ~1400 seed, B=.3g, C=1.5g, D=6g. 400,000 seeds/oz.



4936 Rue *Ruta graveolens* Graveolens means "strong smell." Also known as Herb-of-Grace. Its leaf shape was the inspiration for the suit of clubs! Perennial used as an insect and deer repellent. Very attractive blue-green foliage with delicate yellow flowers. Its leaves, aromatic and bitter, contain iron and rutin for strengthening blood and vessels. Calms heart palpitations, nervous indigestion and colic. European painters used to consume a great deal of it because they believed it was good for their vision! Indeed, it is used in eyewash to soothe tired eyes and relieve headaches from eyestrain. *Rue should never be ingested by pregnant women.* Several herbalists warn that large doses can cause pain and vomiting; also contact dermatitis in sensitive individuals. Ancients rubbed their arms in olive oil before harvesting to prevent dermatitis. Likes a sunny location with poor soil. Needs good drainage. Germinates 10-14 days. 2'. Zones 3-9. A=.5g, ~300 seeds, B=2g, C=8g, D=24g. 16,300 seeds per oz.

4964 Mad-dog Skullcap *Scuttelaria lateriflora* Often called Virginia Skullcap, native spreading perennial needs moist rich soil and likes partial shade. Herbalists claim it is an effective headache remedy, great for insomnia and both calms and strengthens the nervous system. Skullcap finds its way into daily teas as well as formulas for chronic conditions. Called Mad-dog because the tea was once used as a folk remedy for rabies. Enjoy it for its numerous small blue flowers from July through September or put it in a pillow to induce restful sleep. Germination slow, takes 3-4 weeks. 1-2' plant is hardy to Zone 4. A=.05g ~29 seeds, B=.2g, C=.8g. *Not available in size D, order size C.* 16,800 seeds/oz.



4972 Spilanthes *S. oleracea* When I give visitors at Shooting Star Farm a couple of spilanthes leaves to chew, their reaction—either a blissed out smile of contentment or a horrified expression of concern—is quick in coming. Spilanthes' remarkable tingling and mouth-numbing properties appear rapidly and last a while. Its common names—Salad Cress and Toothache Plant—tell us to use its bronzy-purple leaves in salad, or to chew the leaves and flowers for temporary pain relief. Its surface-immune stimulating properties, similar to echinacea's, are giving this herb a wider audience. Deb Soule brought this South American native to our attention. Spilanthes is highly frost-sensitive and must be started indoors in warmth and transplanted after all danger of frost. It adds unusual beauty with its low growth habit and rayless red flowers surrounded by yellow rings. Makes a colorful border planting in fertile moist soil as well as a good conversation piece and valuable herb. Seed grown in Maine without pesticides, herbicides or chemical fertilizers. A=.02 gram, about 60 seeds, B=.08g, C=.32g, D=.96g. 275,000 seeds/oz.

4980 St Johnswort *Hypericum perforatum* Pretty yellow flower of fields and meadows turns tinctures and oils deep red. Used as tea, tincture or infused oil for many nerve disorders, from neuralgia and sciatica to anxiety, insomnia, stress, mild depression, seasonal affective disorder and chronic exhaustion. Helpful during menstruation, postpartum and menopause. The oil is also cooling to sunburn and cuts, soothing to strained joints and muscles. Was even used in the Middle Ages for sword wounds! Likes full sun, nearly any soil. Prechill 4 weeks, do not cover the seed, needs light to germinate, takes 20-30 days. Drought tolerant but essential oil content increases with some moisture. 1-2' perennial hardy Zones 3-10. *Regret we cannot ship to California where it is considered a noxious weed.* A=.1g, ~1,200 seeds, B=.5g, C=5g, D=20g. 350,000 seeds/oz.

4984 Valerian *Valeriana officinalis* Known as Nature's Tranquilizer or Herbal Valium, valerian root is used to reduce tension and anxiety, alleviate insomnia, and relieve muscle spasms and uterine or bowel cramping. Harvest the roots in the fall of the second or later year. Early Greeks referred to valerian as "phu" (like our "phew"), because of the distinctive smell of the roots, described as fetid, musky, or the aroma of old sneakers. Widely used in Europe as a tranquilizer, both for adults and hyperactive kids. Avoid high doses for prolonged periods. Tall leafy 3-5' plant with clusters of honey-scented pale pink flowers. Remove flowers to hasten root development. Plant in moist soil, full sun or partial shade, about 1' apart. Hardy to Zone 3. A=.2g, ~160 seeds, B=.6g, C=2.4g, D=7.2g.

4986 Blue Vervain *Verbena hastata* As the trend toward bioregional herbalism grows, many herbalists prefer to work with plants native to their region. A good addition to our repertoire, this 3' perennial grows naturally in the moist soils of thickets and meadows and will do well in similar garden conditions, providing numerous bristly blue-violet flower-clusters the entire season. Similar to *Verbena officinalis*, but considered more alterative, Vervain acts mainly on the liver and lungs. Also used for nervous and menstrual disorders. Its roots are more active than its lance-shaped leaves. Slow germinator; takes up to a month; needs light, stratification. Transplant in spring or direct seed. Zones 3-8. Seed grown without pesticides, herbicides or chemical fertilizers. NEW! A=.1g, ~350 seeds, B=.4g, C=4g, D=12g, 100,000 seeds/oz.

4990 White Yarrow *Achillea millefolium* Flat-topped white flowers bloom June-August with an odd alluring scent that attracts bees and butterflies. One of the most popular herbs for colds and flu. A hot cup of tea induces a sweat to throw off heat and toxins. Also used to lower blood pressure, and to stanch internal and external bleeding. New research indicates yarrow may be helpful for hay fever or other allergenic mucosal reactions. Avoid large doses during pregnancy. Seeds need light to germinate; do not cover. Likes full sun (grows straggly in shade), will grow 1-2'. Perennial spreads slowly, preferring lean soil. Rich garden soil may produce 3' lush plants which need staking. Zones 2-10. A=.1g, ~700 seeds, B=1g, C=14g, D=56g. 200,000 seeds/oz.

VEGETABLE PLANTING GUIDE

Vegetable	Catalog #	sds/oz	sds/100'	Pkt plants	distance apart	thin to	row spacing	seed depth	min soil temp °F	ideal soil temp	hardiness	planting date
Amaranth	3000-12	25000	1/16 oz	100'	3"	6"	18"	1/8"	60	70-85	T	June 1
Artichoke	3608	180	T	10 pl	3'	No	2'	1/2"	60	65-85	MH	tp late
Basil	4410-99,4728	18000	5g	10-80'	1/2"	4"	18"	1/4"	65	70-85	VT	June 1
Bean, Bush, Dry	200-499	80	8 oz	25'	2"	3"	2-3'	1"	60	70-85	T	late May
Bean, Fava	298	17	1#	12'	4-6"	No	2-3'	1"	50	60-80	H	April
Bean, Pole	286-92,400-19	65	4 oz	10 pl/oz	6/pole	3/pole	3-4'	1"	60	70-85	T	late May
Bean, Soy	488	110	4 oz	14'	3"	No	3'	1"	60	70-90	T	June 1
Beet	2100-99	2200	1/2 oz	20'	1"	2-4"	12-18"	1/2"	50	65-85	H	Apr-July
Broccoli	3310,3400-75	7000	5g	.5g=10'	1"	24-30"	30"	1/4"	50	65-85	MH	tp May/June
Brussels Sprouts	3480	5000	5g	.5g=10'	1"	24-30"	24-30"	1/4"	50	65-85	H	tp May/June
Cabbage	3320-39,3500-40	7500	5g	.5g=10'	1"	24-30"	24-30"	1/4"	50	65-85	MH	tp May/June
Carrot	2000-99	18000	10g	1/8oz=35'	1/4"-1/2"	1"	16-24"	1/2"	50	65-85	H	Apr-July
Cauliflower	3348,3544-79	8000	4g	.5g=12'	1"	30"	30-36"	1/4"	55	65-85	MH	tp May/June
Celery/Celeriac	3610-49	75000	T	500	8"	No	2-3'	1/8"	50	55-70	T	tp June 1
Chard	3030-49	2000	1/2 oz	12'	1"	3"	18-24"	1/2"	50	65-85	H	ASAP
Chicory	2640-59	1800	T	300 pl	1'	No	2'	1/8"	50	60-85	H	tp late June
Chinese Cabbage	3276	9500	1/4 oz	25'	1/2"	12-18"	24-30"	1/4"	50	70-95	MH	late May
Corn	500-699,5930-49	155	4 oz	50'	2-3"	1'	3'	1"	60	70-95	T	late May
Cucumber	1200-1399	1100	1/2 oz	11'	2"	4"	4'	1/2"	60	75-95	VT	June 1
Eggplant	3650-90	6000	T	40 pl	20-30"	No	30-36"	1/4"	68	75-85	VT	tp early Jun
Endive	3060-99	18000	5 g	40'	1"	8"	18-24"	1/4"	50	60-85	H	Apr-July
Gourds, large	1761-99	175	T	20 pl	6/hill	2-3/hill	6'	1/2"	60	70-90	T	tp early Jun
Gourds, small	1700-60	700	1/6 oz	30 hills	6/hill	3/hill	4-6'	1/2"	60	70-90	T	late May
Kale & Collard	3350-89,3586	7500	5 g	40'	1"	12"	2'	1/4"	50	65-85	VH	ASAP-July
Leek	2400-29	10000	T	600 pl	8"	No	2'	1/2"	50	60-80	MH	tp May 1
Lettuce	2700-2999	25000	4g	1g=25'	1/4"	1'	12-18"	1/8"	40	50-75	H	ASAP-Aug
Mache	3100-19	18000	1/4 oz	30'	1/2"	2"	18"	1/4"	48	50-80	VH	ASAP-Aug
Muskmelon	900-49,1000-99	1200	T	5 hills	3/pot	2/hill	5'	1/2"	68	80-95	VT	tp early Jun
Mustard	3138,3200-59	15600	1/8 oz	45'	1"	4-6"	2'	1/4"	50	65-85	MH	Apr-Aug
Okra	3696	420	T	30 pl	12"	No	2-3'	1/4"	65	70-95	VT	tp early Jun
Onion	2440-99	6500	T	400 pl	4"	No	12-18"	1/2"	50	60-85	MH	tp May 1
Pac Choi	3260-75	12500	1/4 oz	30'	1/2"	6-12"	2'	1/4"	50	70-95	MH	May
Parsley	3150-79	18000	1/4 oz	25'	1/4"	1"	12-18"	1/4"	50	50-85	VH	Apr-Aug
Parsnip	2300-10	5000	1/2 oz	25'	1/2"	2-3"	12-18"	1/2"	52	60-77	VH	Apr-July
Pea/snow, snap	700-899	110	8 oz	30'	1 1/2"	No	3' dwarf	3/4"	48	65-85	plants H	ASAP
Pea/snow, snap for fall crop							5' tall				blossoms,pods T	late June
Pepper	3700-3999	4500	T	10-50 pl	12-18"	No	2-3'	1/4"	68	75-85	VT	tp early Jun
Pumpkin	1670-99,1900-99	210	1/2 oz	4-8 hills	6/hill	3/hill	6'	1"	60	70-90	T	late May
Radicchio	2660-99	20000	1/2 oz	30'	1"	8-10"	18"	1/8"	50	60-85	H	late June
Radish	2200-99	2500	1 oz	15'	1/2"	2"	18"	1/2"	50	60-85	H	Apr-Aug
Scorzonera	2322	2000	.6 oz	20'	1"	2"	18"	1/2"	50	65-85	H	Apr-Jun
Spinach	2500-99	2600	1/2 oz	50'	1"	2"	12-18"	1/2"	42	60-80	VH	ASAP
Spinach, fall crop												Aug
Squash, patty pan	1580-99	300	.6 oz	5 hills	6/hill	3/hill	4'	1"	60	70-90	T	late May
Squash, winter	1600-1999	120-480	1/2-1 oz	2-15 hills	6/hill	3/hill	4-6'	1"	60	70-90	T	late May
Squash, summer	1500-99	375	1/2 oz	6 hills	6/hill	3/hill	4'	1"	60	70-90	T	late May
Tomato	4000-4299	9000	T	50-125pl	3'	No	3'	1/4"	60	68-80	T	tp June 1-10
Turnip/Rutabaga	2350-99	9000	1/4 oz	40'	1/2"	3-4"	18"	1/4"	50	60-95	H	Apr-July
Watermelon	950-99,1100-99	700	T	4 hills	3/pot	2/hill	5'	1/2"	68	80-95	VT	tp early Jun
Zucchini	1400-79	180	1 oz	3-4 hills	6/hill	3/hill	4'	1"	60	70-90	T	late May

For information on herbs & flowers please see the variety descriptions.

Abbreviations: Pkt plants=how many row feet our smallest packet will plant T=transplanted only, in our climate.
tp=transplant pl=plants g=grams, 28.4g=1oz. No=not necessary to thin

Hardiness rating VT=very tender=will not survive frost, can be damaged by temperatures under 40°
T=tender=will not survive frost
MH=moderately hardy=survives light frosts
H=hardy=survives frost generally to the low twenties
VH=very hardy=will winter over if protected

Seed Storage

Keep your seed alive by storing it properly! Moisture, humidity and high temperatures are the worst enemies of seed viability. Find a storage area where the sum of relative humidity and temperature is below 100 or place your packets in a glass jar in your freezer or refrigerator. Never keep seed packets in a sunny location, and do not leave them in your greenhouse even for a few hours!

Most seed stored properly will last for several years. A few seeds, such as onions, parsnips and parsley, are short-lived. If in doubt try germinating a sample of your old seed in moist paper towels.

Approximate planting date: ASAP=as soon as ground can be worked, does not thrive in heat
Approximate planting dates are for *our* Central Maine climate. Please make appropriate adjustments for your climate, using hardiness as a guide.

Notes: Seed counts are provided as a *guide*, not a *guarantee*. They vary from cultivar to cultivar. (For more information see the variety descriptions.) You can stretch your seeds further with careful planting. We get a lot more row feet out of a packet of beets serenely planted on a breezy sunny bug-free afternoon than out of the same packet hastily sown in a humid mosquito-infested twilight! Planting rates will vary if intensive methods such as beds are used. Minimum soil temperatures are the lowest we can recommend if you want a good stand. Planting under slightly colder conditions is possible but germination will be slow and spotty. If you have specific cultural questions, consult more detailed resources or get in touch with us.

Flowers for Fragrance, Food, Frivolity & Finery

For Beds & Borders

Achillea	5705,6008
Ageratum	5506-10
China Aster	5024-44,5514,6878
Alyssum	5004-08
Baby's Breath	6020
Bachelor's Button	5050-60
Balsam	5066
Basketflower	5068
Begonia	5518
Bellflower	6028
Black-Eyed Susan	5072
Blue Lace Flower	5144
Butterfly Weed	6034
Calliopsis	5092
Candytuft	5098
China Pink	5108
Chinese Forget-Me-Not	5110
Cerinthe	5520
Clarkia	5120
Cockscomb	5526-30,5732
Columbine	6042-48
Coneflower	4776-7,6054
Coral Bells	6062-64
Coreopsis	6068
Dahlia	5558
Dragonhead	5147
Blue Flax	6120
Scarlet Flax	5150
Flower of the Hour	5570
Four O'Clock	5164
Gaillardia	6130
Gazania	5572-3
Globe Amaranth	5742-54
Godetia	5170
Heliotrope	5576
Impatiens	5582
Lamb's Ear	5776
Larkspur	5174-98
Lavatera	5202-10
Linaria	5212
Lobelia	5214
Love-Lies-Bleeding	5218
Lupine	6186
Marigold	5228-52,5602-16,6879
Monkey Flower	6880
Mountain Bluet	6214
Musk Mallow	6224
Nasturtium	5280-96,5625
Pansy	5306,5632
Petunia	5638-44
Phlox	5312
California Poppy	5352
Portulaca	5652-56
Primrose	6262
Salvia	5662,5804
Schizanthus	5365
Shasta Daisy	6272
Snapdragon	5665-6
Spilanthes	4972
Stock	5374
Strawflower	5860-76
Sweet William	6306
Venidium	5460-1
Verbena	5672-76
Vinca	5682
Zinnia	5468-93,5690

For Baskets & Containers

Alyssum	5004-08
Begonia	5518
Chick-a-biddy	5522
Heliotrope	5576
Impatiens	5582
Johnny-Junp-Up	6170
Lobelia	5214
Marigold	5228-52,5602-16,6879
Monkey Flower	6880
Nasturtium	5280-96,5625
Pansy	5306,5632
Petunia	5638-44
Phlox	6234
Portulaca	5652-56
Verbena	5462
Vinca	5682

Accents & Screens

Amaranth	5012,5218
Bells of Ireland	5714
Butterfly Weed	6034
Cleome	5126-28
Cosmos	5134-40,5552
Elecampane	4782
Euphorbia	5148
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Basketflower	5068
Black-Eyed Susan	5072
Blazing Star	5716
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Baby's Breath	6020
Calendula	5080-88
Cockscomb	5526-30
Grasses & Grains	5900-99
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Alyssum	5004-08
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Carnation	5102
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Mignonette	5262
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Flowering Kale	5160,5566-70
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Morning Glory	5270-76
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Impatiens	5582
Johnny Jump Up	6170
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Petunia	5642-44
Maiden Pink	6196
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Z. haageana	5478

1

Something startles me where I thought I was safest,
I withdraw from the still woods I loved,
I will not go now on the pastures to walk,
I will not strip the clothes from my body to meet my lover
    the sea,
I will not touch my flesh to the earth as to other flesh to
    renew me.

O how can it be that the ground itself does not sicken?
How can you be alive you growths of spring?
How can you furnish health you blood of herbs, roots,
    orchards, grain?
Are they not continually putting distemper'd corpses within
    you?
Is not every continent work'd over and over with sour dead?

Where have you disposed of their carcasses?
Those drunkards and gluttons of so many generations?
Where have you drawn off all the foul liquid and meat?
I do not see any of it upon you to-day, or perhaps I am
    deceiv'd,
I will run a furrow with my plough, I will press my spade
    through the sod and turn it up underneath,
I am sure I shall expose some of the foul meat.

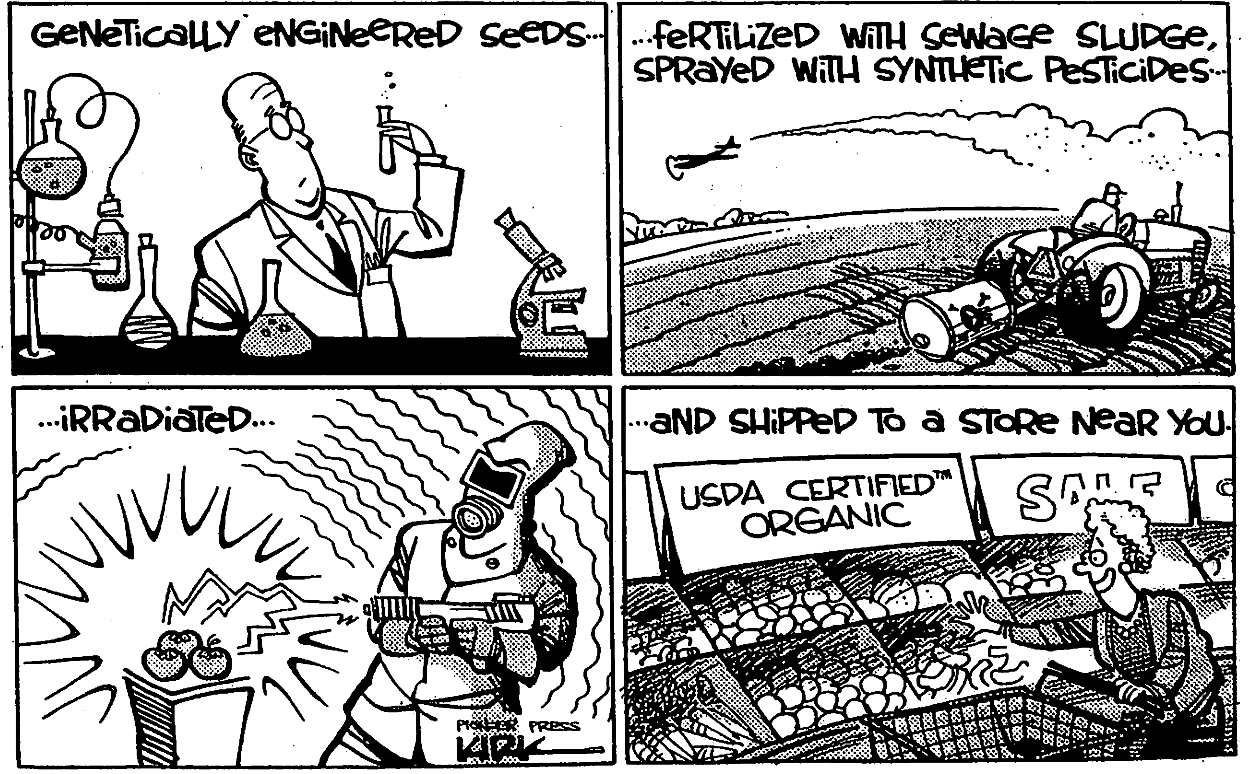
2

Behold this compost! behold it well!
Perhaps every mite has once form'd part of a sick person—
    yet behold!
The grass of spring covers the prairies,
The bean bursts noiselessly through the mould in the garden,
The delicate spear of the onion pierces upward,
The apple-buds cluster together on the apple-branches,
The resurrection of the wheat appears with pale visage out
    of its graves,
The tinge awakes over the willow-tree and the mulberry-tree,
The he-birds carol mornings and evenings while the she-
    birds sit on their nests,
The young of poultry break through the hatch'd eggs,
The new-born of animals appear, the calf is dropt from the
    cow, the colt from the mare,
Out of its little hill faithfully rise the potato's dark green leaves,
Out of its hill rises the yellow maize-stalk, the lilacs bloom
    in the dooryards,
The summer growth is innocent and disdainful above all
    those strata of sour dead.

What chemistry!
That the winds are really not infectious,
That this is no cheat, this transparent green-wash of the sea
    which is so amorous after me.
That it is safe to allow it to lick my naked body all over
    with its tongues,
That it will not endanger me with the fevers that have
    deposited themselves in it,
That all is clean forever and forever,
That the cool drink from the well tastes so good,
That blackberries are so flavorous and juicy,
That the fruits of the apple-orchard and the orange-orchard,
    that melons, grapes, peaches, plums, will none of them
    poison me,
That when I recline on the grass I do not catch any disease,
Though probably every spear of grass rises out of what was
    once a catching disease.

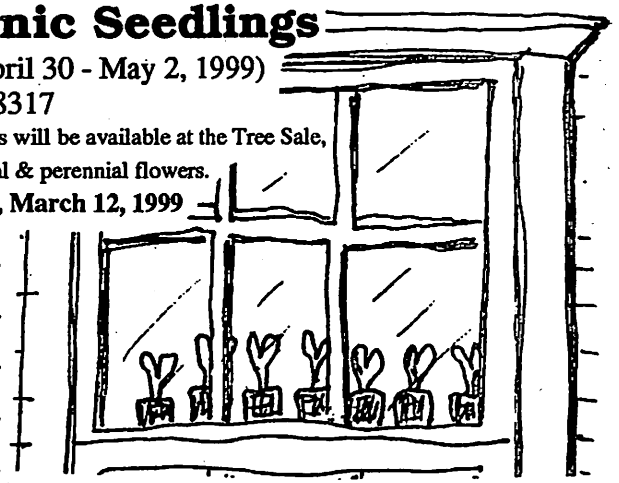
Now I am terrified at the Earth, it is that calm and patient,
It grows such sweet things out of such corruptions,
It turns harmless and stainless on its axis, with such endless
    successions of diseas'd corpses,
It distills such exquisite winds out of such infused fetor,
It renews with such unwitting looks its prodigal, annual,
    sumptuous crops,
It gives such divine materials to men, and accepts such
    leavings from them at last.

This Compost
Leaves of Grass (1891-92)


GENETICALLY ENGINEERED SEEDS...
...FERTILIZED WITH SEWAGE SLUDGE, SPRAYED WITH SYNTHETIC PESTICIDES...
...IRRADIATED...
...AND SHIPPED TO A STORE NEAR YOU.
USDA CERTIFIED™ ORGANIC
SALE
PRESS
KIRK

MOFGA-Certified Organic Seedlings

(for pickup at our annual Tree Sale, April 30 - May 2, 1999)
Fax (207) 872-8317
Additional varieties of vegetable & herb seedlings will be available at the Tree Sale, along with a wide selection of annual & perennial flowers.
Final order deadline - Friday, March 12, 1999



From mailing label: CC-
Name:
Mail Address:
Town: State Zip
Telephone:

Order the number of 6-paks (4-paks for Impatiens) needed, not the number of plants. Please use a bright pen.

Item #	Variety	Quantity	Our use	Item #	Variety	Quantity	Our use
2414S	Leek, Imperial			4205S	Tomato, Early Girl		
2438S	Scallion, Evergreen Hardy White			X250*	Tomato, Jetstar		
2464S	Onion, Redman			4260S	Tomato, Big Beef		
2472S	Onion, Copra			4268S	Tomato, Celebrity		
2484S	Onion, Ailsa Craig			4282S	Cherry Tomato, Sungold		
3158S	Parsley, Gigante d'Italia			4296S	Cherry Tomato, Super Sweet 100		
3166S	Parsley, Forest Green			4418S	Basil, Genovese		
3334S	Cabbage, Laso Red			4518S	Cilantro		
3442S	Broccoli, Green King			4536S	Dill, Fernleaf		
3480S	Brussels Sprouts, Prince Marvel			4646S	Greek Oregano		
3503S	Cabbage, Hermes			4664S	Broadleaf Sage		
3552S	Cauliflower, Snow Crown			4672S	Summer Savory		
3624S	Celery, Ventura			4686S	German Thyme		
3722S	Sweet Pepper, Purple Beauty			5004S	Alyssum, Carpet of Snow		
3754S	Hot Pepper, Hungarian Hot Wax			5084S	Calendula, Pacific Beauty		
3764S	Hot Pepper, Jalapeño			5126S	Cleome, Rose Queen		
3810S	Sweet Pepper, New Ace			5140S	Cosmos, Sensation Mix		
3820S	Sweet Pepper, North Star			5194S	Larkspur, Giant Imperial Mix		
3910S	Sweet Pepper, Elisa			5234S	Marigold, Sparky		
4096S	Tomato, Yellow Plum			5244S	Marigold, Lemon Gem		
4120S	Tomato, Sochulak			5248S	Marigold, Tangerine Gem		
4155S	Tomato, Brandywine			5288S	Nasturtium, Jewel Mix		
X156*	Tomato, Yellow Brandywine			5490S	Zinnia, State Fair Mix		
4194S	Paste Tomato, Bellstar			5582S	Pink Swirl Impatiens Mix, 4-pak		
4196S	Paste Tomato, Amish Paste			5884S	Sweet Annie		

* - not listed in Seed catalog

total number of 6-paks ordered		
multiply by price per 6-pak	$2.50	$2.50
SUBTOTAL		
Add 5.5% Maine sales tax		
GRAND TOTAL		

VISA or MasterCard #
Expiration date Amount
Cardholder Name
Cardholder signature

You may pay with VISA or MasterCard or send check or money order payable to Fedco. Please pay by check or money order if the total of your orders is under $25. You may combine your orders to make one payment, but not to figure discounts. Your card will be charged the total of your enclosed orders when we receive them. We will bill or refund you for any adjustments as each order is completed. We do not charge the adjustments to your credit card. You may fax credit card orders to (207) 872-8317. Thank you.

Send to: Fedco Seeds, PO Box 520, Waterville, ME 04903

Seeds EZ Order Form 1999

Seeds & Books items **1-6899** only. No potatoes or supplies.
Fedco Seeds, PO Box 520, Waterville, ME 04903
Fax (207) 872-8317

From mailing label: CC -
Farm or Group Name
Name
Mailing Address
Town State Zip
Deliver to (include road name)
Town State Zip
Telephone

Number of households ordering

	Yes	No
Will you accept substitutions?	☐	☐
May we give your name to other customers?	☐	☐
May we give your name to organizations & businesses?	☐	☐
Are you a commercial grower?	☐	☐

Would you like (to continue) to receive our other seasonal mailings?

Fruit & Nut Trees, Berries, Ornamentals, Bareroot Perennials	☐	☐
Fall-planted Flower Bulbs & Seed Garlic	☐	☐

Delivery Options: ✓ check one only
UPS/First Class Mail: ☐ regular (must order by 3/19)
Pickup: ☐ early (must order by 1/15)
Pickup: ☐ regular (must order by 2/12)
Pickup: ☐ late (must order by 3/19)
Truck: ☐ must contact Michael Gulick
Other: ☐ Please specify
See pgs. 6 & 7 in the catalog for more information

VISA or MasterCard #
Expiration date Amount
Cardholder Name
Cardholder signature

Seeds & Books Total: $

You may pay with VISA or MasterCard or send check or money order payable to Fedco. Please pay by check or money order if the total of your orders is under $25. You may combine your orders to make one payment, but not to figure discounts. Your card will be charged the total of your enclosed orders when we receive them. We will bill or refund you for any adjustments as each order is completed. We do not charge the adjustments to your credit card. You may fax credit card orders to (207) 872-8317. A $2 handling charge applies to all fax orders.

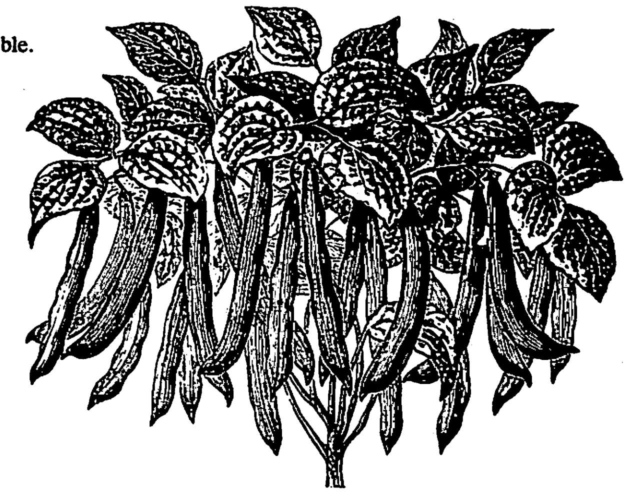
Directions for EZ Form 1999

1. **Order only seeds & books items on this form (#'s 1-6899).**
   Do not order Potatoes (Moose Tubers) or Supplies (Organic Growers Supply) here.
   Potatoes order form begins on page 48E in the center of the catalog. Supplies order form begins on page 48G.
2. Please fill in the information above. We must have a road name for UPS shipments, or else they charge us extra.
3. Please plan your order before filling out the order form. Please keep a copy of your order.
4. Please write your order **in catalog number order**. Write clearly in pen, not pencil.
5. Make sure you have the correct catalog number. Do not write the name of the item. Write the catalog number only.
6. Make sure you are ordering an available size. Write the code letter for the size. Do not write the weight.
7. If you are ordering more than 59 items, please use our long order sheet. Call or fax us, we'll send you one.
8. Only MAINE residents pay sales tax.
9. Only Fedco Seeds items #5000-6899 are taxable. Other Fedco Seeds items are not taxable.
10. Seeds volume discounts apply only to items #1-6899.

Please attach separate page for suggestions

Worksheet for figuring totals (use totals after all discounts & charges):

Seeds & Books
Moose Tubers
Organic Growers Supply
Fedco Trees
Seedlings
Grand Total



Do NOT order potatoes or supplies on this form! (seeds & books only)

Seeds EZ Order Form 1999, items 1-6899 only

STOP! Please read **Directions** on the other side!

Write clearly and list items in numerical order. Double-check your item numbers. Please use pen.

	Item Number	Size Letter	Quantity		Price per	Total Price		Item Number	Size Letter	Quantity		Price per	Total Price
EX	2339	C	2	▨	1.50	3.00	30				▨		
1				▨			31				▨		
2				▨			32				▨		
3				▨			33				▨		
4				▨			34				▨		
5				▨			35				▨		
6				▨			36				▨		
7				▨			37				▨		
8				▨			38				▨		
9				▨			39				▨		
10				▨			40				▨		
11				▨			41				▨		
12				▨			42				▨		
13				▨			43				▨		
14				▨			44				▨		
15				▨			45				▨		
16				▨			46				▨		
17				▨			47				▨		
18				▨			48				▨		
19				▨			49				▨		
20				▨			50				▨		
21				▨			51				▨		
22				▨			52				▨		
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24				▨			54				▨		
25				▨			55				▨		
26				▨			56				▨		
27				▨			57				▨		
28				▨			58				▨		
29				▨			59				▨		

Column 1 subtotal	
Column 2 subtotal	
MAINE residents, items 5000-6899 only-5.5% ME sales tax	
No tax for folks outside Maine. SUBTOTAL	
Only mail orders received by Jan. 30 qualify — Deduct 2% earlybird discount	
Volume discounts apply to seeds & books subtotal only: 10% over $100; 15% over $200; 20% over $300; 22% over $600; 24% over $1000 — Deduct volume discount	
Deduct 10% if picked up	
Deduct 1% organic grower discount	
Add $2 if you fax your order	
ADJUSTED TOTAL	
MOFGA permanent home donation	
MOFGA/NOFA membership(s)	
GRAND TOTAL (minimum order $5)	

Send to:

Fedco Seeds,
PO Box 520,
Waterville, ME 04903

☐ Donate all my refund to MOFGA
☐ up to $5.00
☐ up to $2.00

Moose Tubers 1999

PO Box 520 Waterville ME 04903
fax (207) 872-8317

MOOSE TUBERS

from mailing label CC ______________
Farm or Group Name ______________
Name ______________
Mailing Address ______________
Town ______________ State ______ Zip ______
Deliver to (include Road Name) ______________
Town ______________ State ______ Zip ______
phone ______________

Volume Discounts
(orders received by 2/26)
5% over $100
10% over $200
15% over $400
20% over $850

Subtotal from reverse		▨
Volume Discount	–	▨
Adjusted Total	=	▨
Shipping use chart below	+	▨
Grand Total	=	▨

Make checks payable to **Fedco**

Delivery Options ✓ one only

☐ **UPS/1st Class Mail** order by 5/14
☐ **Moose Tubers Pickup** order by 3/19
☐ **Tree Sale Pickup** order by 4/16
☐ **Common Carrier**
☐ **Other** please specify

Visa or MasterCard	Exp. Date
Cardholder name	Amount
Cardholder signature	

Check here ☐ for no substitutions

☐ Donate all my refund to MOFGA
☐ up to $5.00
☐ up to $2.00

- Order only Moose Tubers items on this form (#'s 7001-7999).
- Do not order Seeds, Books, or Supplies here.
- Ordering instructions on pages 70.
- Please fill out the information and totals blocks above. We **must** have a road name for UPS delivery.
- If you are ordering more than 24 items, please use our order grid. Call us, (207) 873-7333, we'll send you one.
- Use the chart below to calculate your shipping charge.

If your order weighs ☛ And your zip code begins with	under 2 lbs.	2 to 5 lbs.	up to 10 lbs.	up to 15 lbs.	up to 20 lbs.	up to 25 lbs.	up to 30 lbs.	up to 35 lbs.	up to 40 lbs.	over 40 lbs.	over 250 lbs.	over 500 lbs. call for a quote 207-873-7333
030-059	$3.00	$5.00	$5.50	$5.75	$6.25	$6.90	$7.50	$8.15	$8.65	.23/lb.	.15/lb.	
010-029, 060-069, 119-136	$3.00	$5.25	$5.75	$6.25	$7.00	$8.00	$8.75	$9.65	$10.50	.26/lb.	.19/lb.	
070-089, 100-118, 137-227	$3.00	$5.50	$6.25	$6.75	$7.50	$8.50	$9.50	$10.60	$11.30	.28/lb.	.24/lb.	
228-475	$3.00	$6.00	$6.75	$7.25	$8.40	$10.00	$11.25	$12.50	$13.75	.33/lb.	.29/lb.	
476-574	$3.00	$6.00	$7.25	$8.50	$10.25	$12.25	$14.00	$15.75	$17.35	.43/lb.	.34/lb.	
others except AK and HI	$3.00	$6.00	$9.00	$11.20	$14.00	$16.80	$20.00	$22.50	$25.25	.60/lb.	.44/lb.	
AK and HI	$3.00	$6.00	$14.05	$19.30	$24.55	$29.85	$35.10	$40.35	$45.60	1.14/lb.	▨	

Moose Tubers 1999 (Items 7001-7999 only)

No seeds, books or supplies.

Directions on the other side.
It helps us if these are in catalog number order. Please double check your item numbers and weights.

	Item #	Variety	weight	Price each	How many	▨	Weight Total	$ Total
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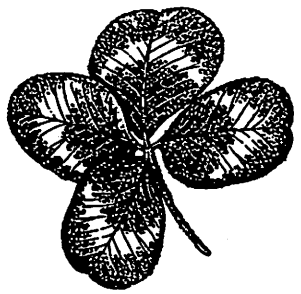
				Subtotals (carry to other side)			Weight	$ Total

Organic Growers Supply 1999

PO Box 520 Waterville ME 04903
fax (207) 872-8317



from mailing label CC____________________

Farm or Group Name____________________

Name____________________

Mailing Address____________________

Town____________________ State_____ Zip________

Deliver to (include Road Name)____________________

Town____________________ State_____ Zip________

phone____________________

Delivery Options ✓ one only

- ☐ **UPS/1st Class Mail**
- ☐ **Early Pickup** order by 1/15
- ☐ **Regular Pickup** order by 2/12
- ☐ **Moose Tubers Pickup** order by 3/19
- ☐ **Tree Sale Pickup** order by 4/16
- ☐ **Common Carrier**
- ☐ **Michael Gulick** you must contact Michael
- ☐ **Other** please specify

Volume Discounts
5% over $100
10% over $250
15% over $800
20% over $1500
over $3000 call

Tax from reverse		▨
Subtotal from reverse	+	▨
Adjusted Total	=	▨
Volume Discount	–	▨
5% Pickup Discount	–	▨
Shipping use chart below	+	▨
Grand Total		▨

Make checks payable to **Fedco**

Visa or MasterCard	Exp. Date
Cardholder name	Amount
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- Order only OGS items on this form (#'s 8001-9999).
- Do not order Seeds, Books, or Moose Tubers here.
- Ordering instructions on page 79.
- Please fill out the information and totals blocks above. We **must** have a road name for UPS delivery.
- If you are ordering more than 24 items, please use our order grid. Call us, (207) 873-7333 we'll send you one.
- Use the chart below to calculate your shipping charge.

If your order weighs ☞ And your zip code begins with	under 2 lbs.	2 to 5 lbs.	up to 10 lbs.	up to 15 lbs.	up to 20 lbs.	up to 25 lbs.	up to 30 lbs.	up to 35 lbs.	up to 40 lbs.	over 40 lbs.	over 250 lbs.	over 500 lbs.
030-059	$3.00	$5.00	$5.50	$5.75	$6.25	$6.90	$7.50	$8.15	$8.65	.23/lb.	.15/lb.	call for a quote 207-873-7333
010-029, 060-069, 119-136	$3.00	$5.25	$5.75	$6.25	$7.00	$8.00	$8.75	$9.65	$10.50	.26/lb.	.19/lb.	
070-089, 100-118, 137-227	$3.00	$5.50	$6.25	$6.75	$7.50	$8.50	$9.50	$10.60	$11.30	.28/lb.	.24/lb.	
228-475	$3.00	$6.00	$6.75	$7.25	$8.40	$10.00	$11.25	$12.50	$13.75	.33/lb.	.29/lb.	
476-574	$3.00	$6.00	$7.25	$8.50	$10.25	$12.25	$14.00	$15.75	$17.35	.43/lb.	.34/lb.	
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AK and HI	$3.00	$6.00	$14.05	$19.30	$24.55	$29.85	$35.10	$40.35	$45.60	1.14/lb.	▨	

Organic Growers Supply 1999 (Items 8001-9999 only)

No seeds, books or Moose Tubers.

Directions on the other side.
It helps us if these are in catalog number order. Please double check your item numbers and weights.

	Item #	Description	weight	Price each	How many	▨	Weight Total	$ Total
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Subtotals (carry to other side)	Weight	$ Total
5.5% tax—Maine residents only—on items 9001-9999 only		Tax

ANNUAL FLOWERS

Prices for annual flowers #5004-5497:
A=70¢, B=$2.00, C=$5.00.

Evening is the best time to cut flowers, early morning next best, midday the worst. Cut on a slant and remove unnecessary foliage. Place fresh cut stems up to their necks in a bucket of warm water and store in a cool place for several hours.

Seeds per packet for flowers are approximate. They are intended as guides, not guarantees, because we pack by weight, not by count. Available in three sizes except where noted. **Packet weights are listed with each flower.**

Flowers are arranged here by common name. For a chart of common uses of flowers and for an index of botanical names see p. 48.

ALYSSUM *Lobularia maritima*

Free-flowering ground cover, blossoming from late spring till fall. Has a fragrance like fresh-mown hay. Cascading habit makes alyssum excellent for windowboxes or terrace edges. Start seed in cool place 2 mos. before setting out. Needs light to germinate. Transplant seedlings 4-8" apart. Cool growing temperatures preserve color intensity. Easy to grow, likes sun, tolerates some shade. To extend their season, shear the plants halfway back four weeks after bloom. Resistant to frost, will tolerate temperatures below 25° F. 90,000 seeds/oz. all types.

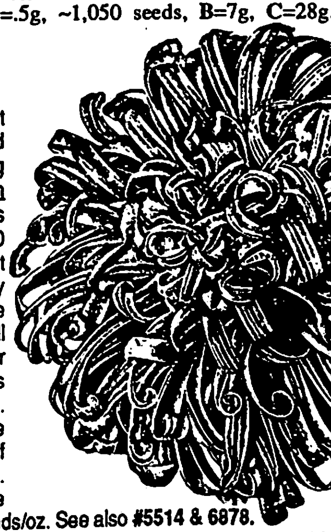
5004 Carpet of Snow Great-smelling dwarf white. 4". Introduced prior to 1926. A=.5g, ~1,600 seeds, B=7g, C=28g.

5008 Pastel Carpet Pleasing shades of violet, rose, pink and white. 2½". A=.5g, ~1,600 seeds, B=2g, C=6g.

5012 Elephant Head Amaranth *Amaranthus gangeticus* This 110-year old heirloom has a flair for the dramatic. As one customer put it, "It is a vigorous grower, beautiful in the field and knocks 'em out at farmers markets!" The deep red, almost purple bloom develops a 6-12" "trunk" at its top during August. The plant grows to a height of 3-4' and the bloom is about 12-18" at the base. Seed passed through immigrants from Germany, saved by three generations of gardeners in Idaho, popularized by Seeds of Change®. Seed grown without pesticides, herbicides or chemical fertilizers. A=.1g, ~150 seeds, B=.3g, C=1.2g. 42,000 seeds/oz.

5018 Rosea Angel's Breath *Gypsophila elegans* Pretty shell-pink single flowers blossom all summer on wispy stalks. Start in cool place indoors 2 mos. before setting outdoors or direct sow. Likes full sun and well-drained soil. 30". Good cutflowers. A=.5g, ~1,050 seeds, B=7g, C=28g. 59,000 seeds/oz.

CHINA ASTER
Callistephus chinensis



Callistephus is from the ancient Greek *kalli* meaning beautiful and *stephos* meaning crown. According to Jo Ann Gardner in The Heirloom Garden, the China Aster began its journey to the west around 1730 when a Jesuit missionary noticed it growing in a field near Beijing. By the late 1700s China Asters were among the most cultivated of all flowers. Good as bedding plants or cutflowers. Range of color includes blues, purples, pinks and white. Sow indoors in a warm spot in late winter, transplant after danger of frost. Germination takes 10 days. Cut stems when 2-4 flowers have opened. All types about 13,000 seeds/oz. See also **#5514 & 6878.**

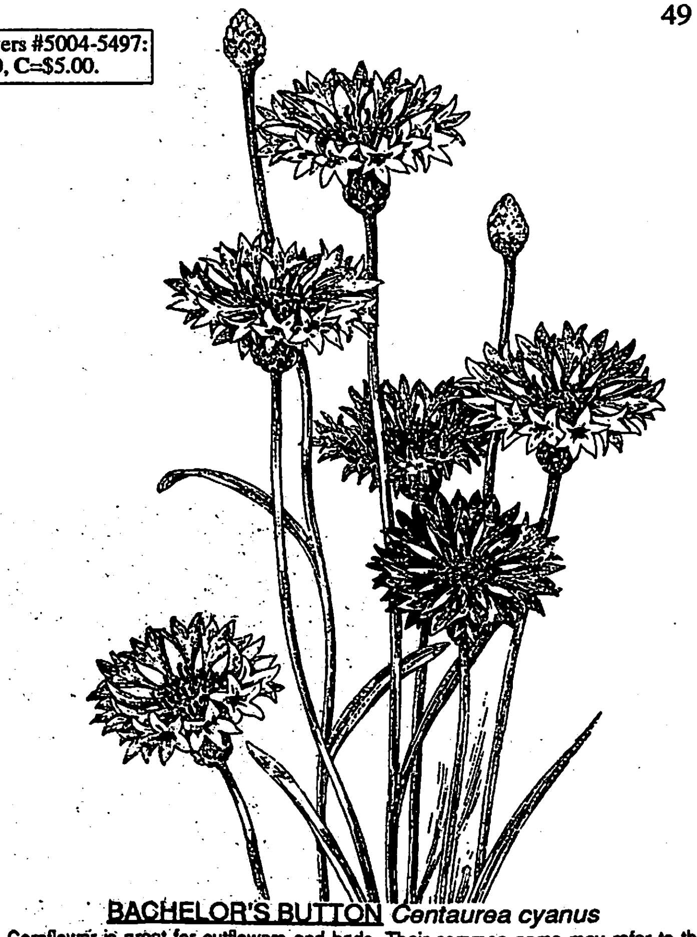
5024 Early Dawn By far our earliest aster, Early Dawn provides bright splashes of color beginning in July. Will continue prolific bloom production if kept deadheaded. Nothing enriches bouquets like the first asters. 12-18". A=.5g, ~210 seeds, B=2g, C=6g.

5028 Crego Mix Although a week later than Early Dawn, the ostrich feather blooms are bolder and seem to hold better in wet and/or cold conditions. 2' plants with 4" diameter flowers. Maule's 1935 Seed Book featured them in color on the back cover. A=.5g, ~250 seeds, B=4g, C=16g.

5032 Princess Mix 2-3" flowers on long wiry stems. The pompon blooms are richly colored with deeply crested centers. Elegant cutflowers which tend to be late bloomers. Still underrated by Fedco customers; these stole the show in our extensive 1994 trial. No other variety can match them in September. A=.25g, ~100 seeds, B=2g, C=8g.

5040 Sea Star Mix The most stunning aster Nikos has ever grown; she found seed in Germany after years of searching for a source. 2' plant bears fancy "tiger paw" flowers 3½-4" across, with a curled whorl of needle-like petals in a choice mix of lavender, blue, pinks, violet and soft white. Very productive and uniform. Excellent in bouquets and striking in the garden. A=.2g, ~90 seeds, B=.6g, C=3g. 13,000 seeds/oz.

5044 Thunderball Among our 30 trial asters in 1994, Fleuroselect medal winner Thunderball stood out far above the rest in midseason. Its bright deep red somewhat spiky 3" blooms drew visitors into our flower beds and were great for cutting because of their long stems. The blooms, starting in midseason, maintained peak quality for a long period, almost till frost. A=.25g, ~110 seeds, B=1g, C=3g.



BACHELOR'S BUTTON *Centaurea cyanus*

Cornflower is great for cutflowers and beds. Their common name may refer to the tight unopened buds' resemblance to buttons or to their popularity as boutonnieres. Was also known as Hurt-Sickle because its wiry stems dulled many a sickle during mowing time. Start in warm place 2 months before setting out or direct seed in May in a sunny location. Make a succession planting in mid-late June if you desire late summer blooms. Will self-sow. Lasts longer than most flowers after frost. Cut when flowers are just beginning to open—they'll open more as they dry in the vase. Thomas Jefferson cultivated Bachelor's Button around 1786. 3'. About 6,000 seeds/oz. 1lb size not listed on the grid form, see p. 6 for bulk ordering instructions.

5050 Black Ball Such deep burgundy that it appears to be stunning black. A most unusual color for a cornflower. Seed organically grown by Susan Belding of Old Stage Farm. NEW! A=.25g, ~55 seeds. *Not available in larger sizes.*

5052 Blue Boy Showy blue. A=1g, ~210 seeds, B=28g, C=112g, D=1lb, $12.00.

5056 Red Boy Deep red. A=1g, ~210 seeds, B=28g, C=112g, D=1lb, $12.00.

5060 Mix Blend of blue, pink, red, white flowers with blue predominating. Very showy. A=1g, ~210 seeds, B=28g, C=112g, D=1lb, $12.00.

5066 Double Camellia Mix Balsam *Impatiens balsamina* Balsam reigned supreme during the Victorian era but has been neglected for almost a century. Makes a full show of abundant pink, rose & white rosettes along the axils up its stems. Direct seed after danger of frost. Don't cover the seed. Thin to 6-12" for a more spectacular display. Pinch off the side branches and the first flowers to encourage a profusion of blooms near the top of the plant and give the effect of a ready-made bouquet. 2'. A=1g, ~120 seeds, B=7g, C=28g. 3,300 seeds/oz.

5068 Basketflower *Centaurea americana* Outstanding fluffy pinkish lavender "ostrich plume" flowers bloom all summer, attracting butterflies. Sometimes called "thornless thistle," these 4-5" blossoms open in the morning and close at midday to a woven basket form. As a cutflower they have a 3-day vase life, providing special interest as they continue to open and close. Soak seeds overnight and direct seed. 3-4'. Seed organically grown in Maine by Susan Belding at Old Stage Farm. A=.5 gram ~35 seeds, B=1.5g, C=6g. 2,000 seeds/oz.

5072 Indian Summer Black-Eyed Susan *Rudbeckia hirta* With so many wild Black-Eyed Susans growing in our fields, why buy seed for them? You won't find any wild ones that look like 1995 AAS Indian Summer, whose enormous five-petaled 6-9" golden yellow blooms are more reminiscent of sunflowers than Susies. Indian Summer grows up to 3' but branches so that staking is not necessary. Its long straight stems make excellent cutflowers which last more than a week in the vase. Start indoors for early blooms. Will survive light fall frosts. Bred by Fleck of Germany. A=.1g, ~140 seeds, B=.3g, C=2.1g. 41,000 seeds/oz.

Prices for annual flowers #5004-5497:
A=70¢, B=$2.00, C=$5.00.

CALENDULA *C. officinalis*

Old kitchen garden flower, 18-20" tall, also known as pot marigold. The beautiful orange and yellow double flowers, good for cutflower arrangements, are also edible. They thrive in cool weather, being one of the last flowers to succumb to fall frosts. Can be direct seeded in May or started indoors in cool place for early blooms. Cover the seed. Germination takes 4-10 days. Don't crowd, give them full sun. Deadhead to keep blooms coming and make the patch more attractive.

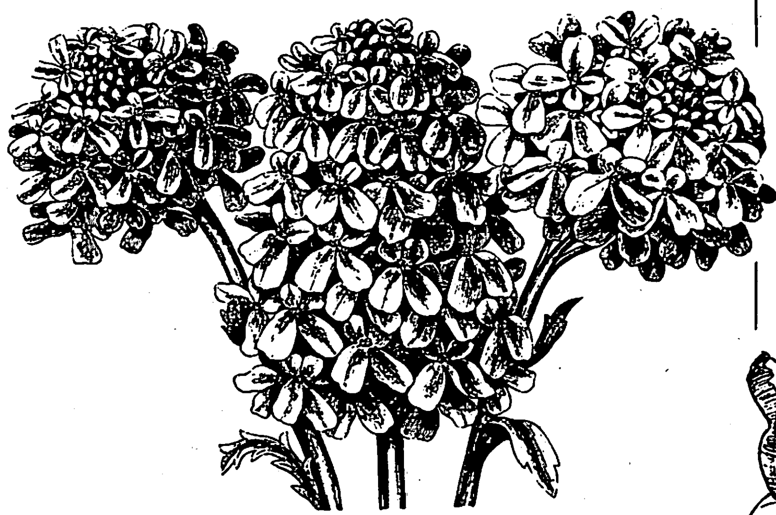
5080 Kablouna Mix Distinct refined form with a neat crested center not showing the eye. A=1g, ~140 seeds, B=4g, C=12g, D=1oz, $8.00, not listed on the grid form, see p. 6 for bulk ordering instructions. 4,000 seeds/oz.

5084 Pacific Beauty Mix The classic lovely yellow and orange mix. Highly regarded for its healing gifts by herbalists. A Woman's Book of Herbs, #6696, has details. A=2g, ~300 seeds, B=14g, C=56g, D=1lb, $16.00, not listed on the grid form, see p. 6 for bulk ordering instructions. 4,500 seeds/oz.

5088 Touch of Red Mix Deep mahogany red in centers, on petal backs and edges creates pleasing contrast. Excellent for cutflowers. Tends to fade quickly after heavy rains, but was gorgeous during our dry October, 1994. A=1g, ~200 seeds, B=3g, C=9g. 5,670 seeds/oz.

5092 Calliopsis Mix *Coreopsis tinctoria* A low-maintenance rugged flower to bring a splash of fall color into your garden with petals brushed in yellow, mahogany and red surrounding mahogany centers. Its large cosmos-like flowers atop $2^1/_2$' erect stems flourish in full sun and make excellent cut flowers. Good for less cultivated areas: open spaces, roadsides and borders because it competes well with grasses and reseeds easily. A=.3g, ~220 seeds, B=.9g, C=4.5g. 62,500 seeds/oz.

5094 Canary Creeper *Tropaeolum peregrinum* A climbing relative of the nasturtium. With a little coaxing, profuse vines can climb 8', providing golden-yellow flowers late in the season. Grows in shade but prefers full sun. A=1g, ~15 seeds, B=7g, C=28g. 420 seeds/oz.



5098 White Pinnacle Candytuft *Iberis odorata* Makes a lovely border plant with its show of fragrant white blossoms with small green buttons in he center. Also excellent for cutflowers. *Candia*, an old name for Crete, and *Iberis* show its Mediterranean origins. Direct seed in late spring. 20". A=.5g, ~190 seeds, B=5g, C=15g. 10,880 seeds/oz.

5102 Dwarf Fragrance Mix Carnation *Dianthus caryophyllus* Also known as Clove Pink. Notable for their outstanding fragrance, they come in a wide range of colors including crimson, rose, pink and white. Their stiff stems help make them a good cutflower. Remove lateral buds to produce larger flower on top. Start indoors 8 weeks before setting out after danger of frost is past. 12-14". A=.3g, ~150 seeds, B=1.5g, C=6g. 14,500 seeds/oz.

5108 Double Mix China Pink *Dianthus chinensis* The name Dianthus comes from the Greek meaning "divine flowers." The name well fits the clustered, double dainty fringed blooms in white, salmon-pink and crimson. They are commonly known as pinks, not for their color, but for their serrated petal tips which look like they've been pinked. Start indoors in cool place 6-8 weeks before setting out. Likes cool weather. Avoid heavy nitrogen fertilizers. Height 14-20". A=.5g, ~400 seeds, B=7g, C=28g. 23,100 seeds/oz.

5110 Chinese Forget-Me-Not *Cynoglossum amabile* Our thanks to Susan Belding of Old Stage Farm for suggesting these and sending us a seed sample. Henceforth they will be staples in my annual garden for I have found little else that can match the brightness of their tiny 5-petaled azure blue blossoms. Plants are small, about 18" tall, but very floriferous, with three blooms per cluster and a half dozen clusters per plant. To create a spectacular color contrast try them alongside Schizanthus near candytuft and Godetia. Start indoors six weeks before the last frost or direct seed outdoors in spring. Space plants 9" apart. 6,800 seeds/oz. A=1g, ~240 seeds, B=7g, C=28g.

5120 Clarkia Mix *C. unguiculata* Also known as Rocky Mountain Garland, a native of the American west. Most were discovered during the Lewis & Clark expedition, giving the plant its name. A standout in our flower beds, always one of the first to bloom, often lasting a long time. Bears double flowers of pink, red and white along 2' erect stems. Closely related to Godetia, but much less likely to lodge. Can be direct seeded, but for earlier blooms start indoors and transplant after danger of frost. Needs light to germinate. Takes 1 week at 60°F. Keep mulched and moist in the heat of summer for longer blooms. A=1g, ~3,500 seeds, B=7g, C=28g. 98,000 seeds/oz.

CLEOME *C. hasslerana*

The old-fashioned spider flower has made a comeback. Cleome sets large open flower clusters with very long stamens atop 4' stalks. For better germination, prechill seeds in refrigerator. Do not cover seed. Blooms throughout the summer and likes the hot and dry conditions of midsummer. 22,500 seeds/oz.

5126 Rose Queen A= .5g, ~400 seeds, B=7g, C=28g.

5128 Violet Queen Was gorgeous 8/98. A= .5g, ~400 seeds, B=2g, C=8g.

COSMOS *spp.*

Sun-loving, free-flowering all summer, can serve as an accent, screen or cutflowers. For best results, thin its fast-growing large plants. Germinates in 1 week at 75°. Light aids germination. 3,900 seeds/oz. See also #5552.

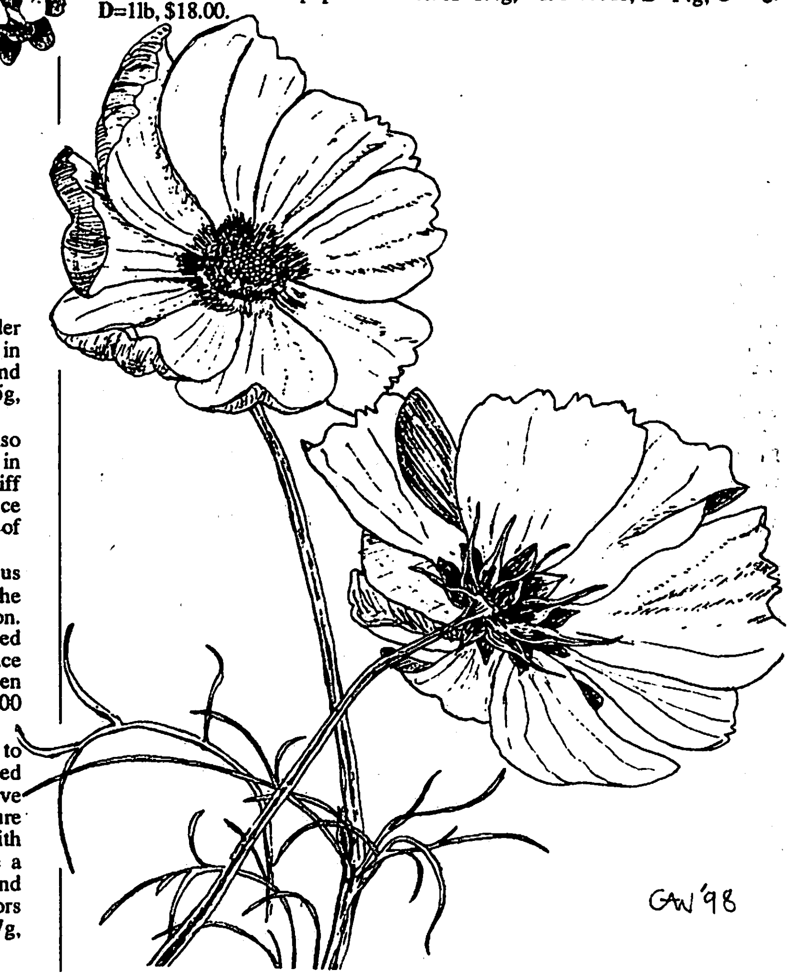
D size is not listed on the grid form, see p. 6 for bulk ordering instructions.

5134 Bright Lights Mix *C. sulphureus* A bright mixture of yellow and gold shades reaching 3'. Not frost hardy. A= 1g, ~140 seeds, B=7g, C=28g, D=4oz, $10.00.

5136 Picotee *C. bipinnatus* A unique bicolor cosmos for the aficionado. Flowers vary in hue from white to pink to rose, with each serrated petal edged in contrasting magenta. Bright golden centers. Plants grow 4' climaxed by blooms $2^1/_2$-3" across. A nice addition to your cosmos bouquet. A=.5g, ~60 seeds, B=3g, C=15g, D=1oz, $10.00. 3,500 seeds/oz.

5139 Sea Shells *C. b.* If each petal on an Early Sensation were to curl into a tube, they'd have the striking delicate look of a Sea Shells. 3' plants come in the usual mix of red, pink and white shades, each with a yellow button eye. A lovely cosmos. A=.5g, ~85 seeds, B=3g, C=12g, D=1oz, $8.00. About 5,000 seeds/oz.

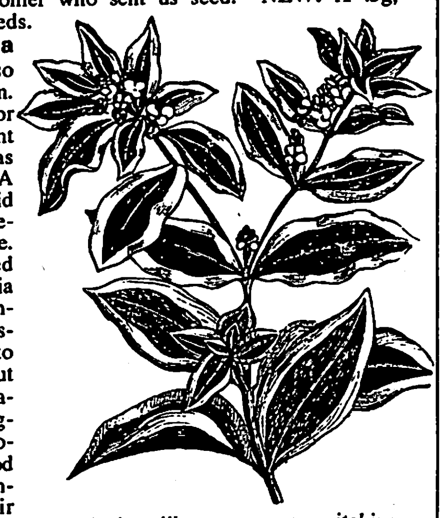
5140 Early Sensation Mix *C. b.* So named because its early maturity created a sensation when it first came out. 1936 AAS. Largest flowered cosmos variety needs little tending. One of the last to give in to frost, will flower 10 weeks after direct seeding. Pinks, reds, purples and occasional whites. 4-5'. Our most popular flower. A=1.4g, ~195 seeds, B=14g, C=56g, D=1lb, $18.00.



Prices for annual flowers #5004-5497:
A=70¢, B=$2.00, C=$5.00.

5144 Lacy Blue Didiscus *Trachymene coerulea* Also known as Blue Lace Flower. Looks like a light blue version of Queen Anne's Lace. Airy flower heads on 2' stems float like a blue mist above attractive finely-cut foliage and are excellent for cutting. Start indoors or direct seed after danger of frost. Takes 14-21 days to germinate. Transplant 8" apart. Likes full sun. A=.25g, ~90 seeds, B=1g, C=3g. 1 oz=10,300 seeds.

5147 Moldavian Dragonhead *Dracocephalum moldavica* A fine bee and butterfly plant covered with small lavender blue flowers that bear a fanciful resemblance to tiny dragon heads, complete with "fangs." The 2' multi-branching plants with rugged bushy habit make good garden filler. Lightly scented lemon leaves intensify when dry, hinting at possibilities for potpourri. Used dry as a tea, they have little flavor but do provide a slight tang. Recommended by a customer who sent us seed. NEW! A=.5g, B=1.5g, C=4.5g. 1 oz=11,300 seeds.



5148 Kilimanjaro Euphorbia *Euphorbia marginata* Also known as Snow-on-the-Mountain. Get ready for a euphorbic color sensation when you interplant these with bright flowers such as Cynoglossum or Venidium. A foliage plant grown for its ovoid green leaves which quickly become outlined in striking white. The contrasting white developed more quickly in this Euphorbia than in others we tried, transforming the garden with a blazing display of color. Well adapted to poor or average soils; grew about 2' in my dry raised beds but capable of reaching a foot taller. Long-lasting in the vase where it provides valuable filler with a good color base. Attracted much attention at our Common Ground Fair booth. *Caution: Among sensitive individuals the milky sap may cause itching or rash*. NEW! A=.3g ~18 seeds, B=.9g, C=4.5g. 1,700 seeds/oz.

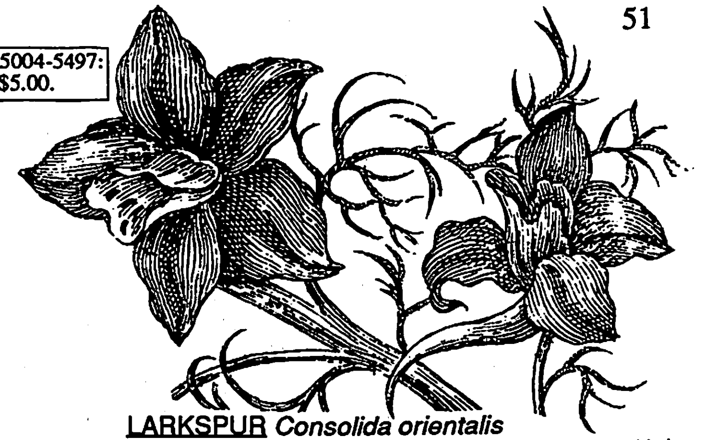
5150 Scarlet Flax *Linum grandiflorum* 'Rubrum' Five-petalled blooms up to $1^1/_2$" across on bushy 1' plants. Bright red flowers with a silky sheen. For best effect grow a generous mass. Direct seed as soon as ground can be worked. Do not transplant. A=1g, ~300 seeds, B=7g, C=28g. 8,400 seeds/oz.

5156 Flowering Cabbage Mix *Brassica oleracea* Good ornamental for our climate because the colors deepen at the onset of cold weather. Start indoors 5-7 weeks before setting out in midsummer for fall maturity. While weather is still hot, sidedress with manure so that the plants will make rapid growth before nights begin cooling. As autumn approaches, withhold nitrogen to speed coloring. 10". A=.25g, ~80 seeds, B=1g, C=4g. 9,000 seeds/oz.

5160 Osaka Mix Flowering Kale *B. o.* F-1 hybrid. A mix of red, pink and white compact heads with wavy-edged leaves, providing color contrasts for accent or pattern plantings. Used as edible garnish and in salads; also called salad savoy. Prefers cool weather. Culture same as for flowering cabbage. 8". A=.5g, ~250 seeds, B=2g, C=6g. 14,500 seeds/oz. See also #5566-5568.

5164 Tall Mix Four O'Clock *Mirabilis jalapa* Also known as Marvel of Peru. The fragrant trumpet-shaped flowers open in late afternoon, reaching peak loveliness at dusk when they appear to glow. The 2-3' plants make good background or annual hedge. Start indoors, transplant out when warm weather has settled in. Likes full sun. Will self sow in warmer areas. A=3g, ~50 seeds, B=9g, C=27g. 520 seeds/oz.

5170 Dwarf Double Azalea Mix Godetia *Clarkia amoena* Also known as Farewell to Spring. So lovely, deserves to be better known. Frilly delicate double and semi-double blooms on 16" stems in pastel shades of pink, red, rose and lilac stand out in bouquets. Direct seed in early May. Light aids germination. Wonderful in borders, benefits from taller flowers in the background to form contrast, give support. A=.7g, ~2,200 seeds, B=7g, C=28g. 89,500 seeds/oz.



LARKSPUR *Consolida orientalis*

Giant Imperial, 3'. Long flower spikes are used as cutflowers or in dried arrangements. Delphinium-like flowers on upright long-stemmed plants. Cut when one third of the flowers on the stem are open. Likes cool, moist conditions. Very slow to give in to fall frosts. May be direct seeded in early spring or started indoors and set out in 8 weeks. Germinates in 21 days. All types about 9,400 seeds/oz.

5174 Blue Spire Dark-blue. A=1g, ~330 seeds, B=7g, C=28g.

5178 Carmine A=1g, ~330 seeds, B=4g, C=16g.

5182 Lilac A=1g, ~330 seeds, B=4g, C=16g.

5186 Pink Perfection A=1g, ~330 seeds, B=4g, C=16g.

5190 White King 1937 AAS. A=1g, ~330 seeds, B=4g, C=16g.

5194 Mixed pinks, purples, blues and white make a beautiful background, good for cutting. A=1g, ~280 seeds, B=7g, C=28g, D=4oz, $12.00, not listed on the grid form, see p. 6 for bulk ordering instructions.

5198 Blue Cloud *C. regalis* Blue Cloud doesn't shoot up a single spike like most larkspurs. Instead it sends flocks of bushy 5-petaled rich blue $^1/_2$" florets on wispy foliage which, *en masse*, give the effect of clouds. Its tiny seed pods are equally decorative. Will self-sow vigorously. A=.1g, ~80 seeds, B=.5g, C=5g. 22,800 seeds/oz.

LAVATERA *L. trimestris*

People seeing my garden for the first time always ask for the identity of this flower so they can grow it the following year. Every stalk is covered with single funnel-shaped blossoms. Start indoors 8 wks before setting out, or direct seed in sunny spot. Cut when flowers have just begun to bloom. Will survive light fall frosts. Also known as Herb Treemallow; botanical name honors the 16th century Swiss naturalist brothers Lavater, and the three-month bloom time in warmer climes. 4,200 seeds/oz.

5202 Pink An explosion of exotic pink blooms on 2' tall bushy plants great for borders. Lasts in bouquets after most others have shrivelled. A=1g, ~150 seeds, B=4g, C=16g.

5206 Mont Blanc Slightly dwarf (20") hybrid with white blossoms. Fleuroselect medal winner. Too short for commercial cutting, but nice in borders. Looks great planted alongside Pink Lavatera. A=.5g, ~75 seeds, B=2g, C=6g.

5210 Tanagra Extra-large deep rose flowers with lighter veining borne on robust 3' plants. For a rosy combination, plant Tanagra alongside our traditional Pink! A=1g, ~150 seeds, B=4g, C=12g.

5212 Fairy Bouquet Mixed Linaria *L. maroccana* Also known as Toadflax. Dainty blooms, resembling small snapdragons, in a wide range of colors (rose, pink, orange, lilac, purple, white and soft yellow), each with a pollen-yellow throat, really look like the work of plant fairies. Flowers early and lasts until early August, with fully branched stems and feathery foliage. Good along borders in massed plantings. Sow outdoors as soon as the ground can be worked. Intolerant of extreme heat. Seed is already on hand so there will be no disappointments. A=.1g, ~1,300 seeds, B=.5g, C=3g. 13,000 seeds/g.

5214 Crystal Palace Blue Lobelia *L. erinus* Named for the Flemish botanist Mathias de l'Obel who was a physician to King James I of England. With deep blue flowers on bronze-green foliage, this is the perfect window box plant. 4" tall, great for edgings, walks and borders. Mix with dwarf yellow marigolds for a spectacular contrast. Sow indoors in a cool place before setting out, or in planters. Needs light to germinate. Tolerates some shade. Cannot stand frost. A=.2g, ~5,000 seeds, B=1g, C=4g. 26,400 seeds/g.

5218 Loves-Lies-Bleeding *Amaranthus caudatus* Also known as Tassel Flower. This vigorous 2-4' branching annual sports long drooping red tassels which hold until frost. Makes a good border; stake and tie for neater appearance. Sow indoors 5-6 wks before last frost. Needs light to germinate. A=1g, ~1,500 seeds, B=7g, C=28g. 43,000 seeds/oz.

5224 High Mallow *Malva sylvestris* var. *mauritania* First caught my eye as a volunteer in one of my compost piles, a refugee from a distant flower garden. Bears striking large single fuchsia saucer-shaped flowers with dark veins. An outstanding blue ribbon specimen at the 1994 Common Ground Fair captivated all who saw it. This is a large plant—about 3' across and 4' high—so give it plenty of room in a focal point in your garden. Biennial usually grown as an annual; will often flower the first year. A=.15g, ~15 seeds, B=.6g, C=1.8g. 2,800 seeds/oz.

MARIGOLD *Tagetes* spp.

Good for bedding, in planters, or low borders. Grown in Brazil 400 years ago, said to have been sacred to the Aztecs. In 1939 Burpee's Red and Gold hybrid was the first hybrid flower from seed to be offered commercially in the United States. Sow after soil has warmed, or inside in a warm spot, 3 weeks before setting out. Likes full sun. About 9,000 seeds/oz. See also **#5601-5616 & 6879.**

5228 Aurora Yellow Fire *T. patula* This French beauty lights our fires with bright yellow flowers inset with red flames. Extra early with numerous large flowers, consistently double from the first bloom to the last. The compact neat rounded 8-10" plants bear flat-petaled 2½" blooms. Not daylength sensitive. A=.25g, ~75 seeds, B=1g, C=4g.

5230 Brocade Mix French Dwarf Double *T. p.* Abundant color on neat, compact 10" plants. Ruffled flowers in rust, yellow, orange, red & bicolors. A=.5g, ~165 seeds, B=7g, C=28g.

5234 Sparky Mix French Dwarf Double *T. p.* Combines yellow, gold, orange and red blooms on free flowering compact 10-12" plants. Flowers are 2-2½" wide with smoother petals than Brocade. A=1g, ~300 seeds, B=7g, C=28g.

5236 Troubadour Yellow French Dwarf Double *T. p.* These brilliant glowing yellow flowers began blooming in July and never stopped till frost. Bears fully double flowers right from the start, unlike most other early-blooming dwarf doubles. Free-flowering 2" blooms on 10" plants will keep coming if you keep deadheading. Start indoors 3-4 weeks before setting out after danger of frost. NEW! A=.3g, ~90 seeds, B=.9g, C=4.5g.

5238 Lemondrop French Dwarf Double *T. p.* A beautiful true yellow extra-dwarf crested variety. Blooms early, through summer into fall. Start 3 weeks before setting out, or direct sow. A=.5g, ~320 seeds, B=1.5g, C=4.5g.

5240 Striped Marvel *T. p. nana* If you've become blasé about marigolds because they all seem to look alike, you probably haven't encountered the striped ones yet. Whether called Pinwheel, Harlequin, or Striped Marvel, the blooms jump out at you with their intense color variations, juxtaposing yellows and maroons in arresting patterns. *Caution: Very luxuriant foliage. We had few blooms relative to plant mass in 1998 and will try a spot with poorer soil next time.* Grows up to 2'. *Seed in short supply; order early.* A=1g, ~340 seeds. *Not available in larger sizes.*

5244 Lemon Gem *T. tenuifolia pumila* Compact 10-12" plant bears tiny bright lemon-yellow flowers early, through summer, into fall. Blooms are edible with lemony scent. Start 3 weeks before setting out, or direct sow. Cynoglossom makes a great background plant to the Gems. A=.5g, ~600 seeds, B=1.5g, C=6g. 35,000 seeds/oz.

5248 Tangerine Gem *T. t. p.* As above, except the tiny fragrant flowers are deep orange. They make colorful tasty additions to salads. If you cut them, they'll keep coming. Watering them in dry spells also helps. A=.5g, ~600 seeds, B=1.5g, C=6g.

5252 Tall African Crackerjack Mix *T. erecta* A tall (30") carnation-flowered type. Early mix of orange, gold, yellow. Large, fully doubled flowers rarely need staking. A=1g, ~320 seeds, B=14g, C=56g.

Prices for annual flowers #5004-5497:
A=70¢, B=$2.00, C=$5.00.

5258 Torch Mexican Sunflower *Tithonia rotundifolia* These 4' plants bear reddish-orange 4-5" blooms which hummingbirds find extremely attractive. My fondness for this showy flower is shared by our customers who purchased over 750 packets in 1998. 1951 AAS. A=.2g, ~20 seeds, B=.6g, C=7.2g. 2,800 seeds/oz.

5262 Mignonette *Reseda odorata* Louise Beebe Wilder (see our book section, #6547) said that few flowers have attained greater fame or been so loved as Mignonette. Its insignificant yellow-green blossoms send the haunting scent of raspberries wafting through the air. Less than a foot high, it can be grown in pots and moved for best effect; however its scent will fade if it is removed from full-day sun. Prefers fertile well-drained soil and cool weather. Once considered fashionable on the balconies of Paris, Mignonette is still grown in Holland for European cutflower markets. A=1g, ~900 seeds, B=4g, C=16g. 25,500 seeds/oz.

MORNING GLORY *Ipomoea spp.*

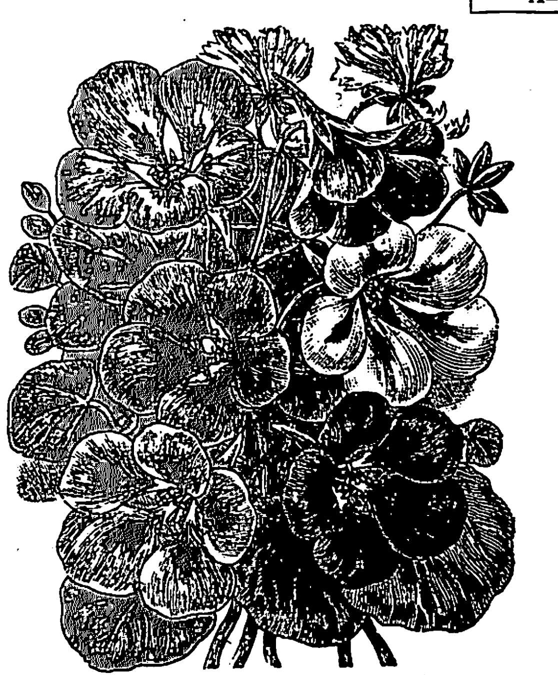
Easily grown climber with trumpet-shaped flowers provides color and shade. Decorates fence or post. Soak seeds overnight before sowing. Plant with NE to SE exposure for best results. Nick seeds with a file and soak overnight to speed germination. Germinates in 1 week at 75-80° F. Sow outdoors after danger of frost or indoors in jiffy pots as they resent transplanting. Overly rich soil will yield excess foliage and sparse blooms. A=3.5g, ~80 seeds. 675 seeds/oz.

5270 Flying Saucers *I. nil* This is the floral version of ET, the blooms like pods from another world. Actually Sputnik had been in space only three years, and the lunar landing was still nine years hence when seedsman Darold Decker created these gaudy 4" open trumpets. A bicolor morning glory, featuring clear white cups streaked with sky blue. The swirly blue patterns create the ethereal saucer effect that inspired its name. Can be brought inside in the bud stage for a week-long show as the amazing blossoms unfurl their patterns. Climber grows 8-10'. NEW! A=1.5g, ~45 seeds, B=6g, C=18g.

5272 Clarke's Heavenly Blue *I. tricolor* Old favorite predates 1911. Intense blue lightens toward center; a sun-loving vine. 12'. A=3.5g, ~80 seeds, B=14g, C=56g, D=1lb, $16.00, not listed on the grid form, see p. 6 for bulk ordering instructions.

5276 Scarlett O'Hara *I. nil* Very large wine-red flowers on 10' vines. 1939 AAS. A=3.5g, ~80 seeds, B=14g, C=56g.

Prices for annual flowers #5004-5497:
A=70¢, B=$2.00, C=$5.00.



NASTURTIUM *Tropaeolum majus*

Edible flowers lend a peppery taste to salads, with each color adding contrast and subtle variations in flavor. Blooms keep coming if cut. Round leaves also edible. Formerly used as a remedy against scurvy. Needs warmth to germinate, but cool temperatures outdoors for continuous blooming. Intolerant of frost. Avoid excess nitrogen, but don't believe the myth that nasties thrive best in poor soil. Like full sun. About 200 seeds/oz. all types. See also **#5625.**

1# prices not listed on the grid form, see p. 6 for bulk ordering instructions.

5280 Alaska Mix Striking variegated green and white foliage will make a formidable bush if you feed it heavily. But go easy on the nitrogen if you want to eat lots of its tangy yellow and orange blossoms. A great plant for hanging baskets. 16". A=2g, ~16 seeds, B=8g, C=24g, D=1lb, $40.00.

5284 Empress of India Hailed as a "great novelty" when introduced in 1884, and still popular today. Stems and leaves have a red toning that gives the plant a lovely olive color. Attractive scarlet flowers are spicy hot. Darker coloring makes a delightful contrast in your nasturtium patch. Do not feed heavily. 16" plants. A=3g, ~22 seeds, B=9g, C=27g, D=1lb, $38.00.

5288 Jewel Mix Bushy variety holds bloom above foliage. Early free-flowering blend of colors. Blooms 6 weeks after sowing & continues until frost. 16". A=4g, ~25 seeds, B=16g, C=64g, 1lb, D=1 lb, $18.00.

5292 Whirlybird 7-Color Blend *T. minus* Has large spurless upward-facing flowers borne above the foliage. Compact non-trailing plant habit. Recommended for commercial growers. 12" plants. A=2g, ~12 seeds, B=6g, C=24g, D=1lb, $40.00.

5296 Tall Climbing Mix Tall trailing mix to 2' in red, orange, gold and exquisite bicolor shades. Each different colored blossom has its own distinctive taste. Plants will spread but having no tendrils cannot, strictly speaking, climb. *The most prolific blossom set of any of the nasturtiums we have tried.* A=4g, ~25 seeds, B=28g, C=84g, D=1lb, $18.00.

5306 Swiss Giant Regular Mix Pansy *Viola* x *wittrockiana* Blotched flowers in a wide range of colors, with best color in cool of spring, 6" plants good for bedding or borders. Not recommended for commercial growers. Start 2 months prior to planting in a cool place. Likes partial sun. See **#5632** for another pansy. A=.1g, ~70 seeds, B=1g, C=4g. 20,000 seeds/oz.

5312 Drummondii Mix Phlox *P. drummondii* Their name honors Thomas Drummond, a British naturalist who "discovered" them in Texas during the 1820s or 1830s and sent seed back home. Among the most colorful annuals for summer and fall beds, borders or window boxes. A large-flowered mix of crimson, scarlet, pink, white and salmon with white eyes. Start early indoors or direct sow in spring. Likes moist, well-drained soil in full sun. One of the longest lasting in the vase. About the last to succumb to frost. 6-8". A=.4g, ~200 seeds, B=2g, C=8g. 14,000 seeds/oz.

5316 Imperial Mix Pincushion Flower *Scabiosa atropurpurea* A neglected excellent old-fashioned cutflower. A new common name and different Latin name would help. Hardly anyone even knows what a pincushion is any more, and as for the images conjured by *scabiosa*, well, never mind. Still, it is one of my favorites; its beauty belies its name. Flowers, perfect 1" mounds of tiny blossoms with a sweet smell, bloom profusely on long stems and last a week in the vase. Blend of crimson, rose, lavender and white. Grows to 3', or pinch to induce bushiness. Start indoors 4-5 weeks before last frost. A=.5g, ~40 seeds, B=3g, C=15g. 2,400 seeds/oz.

POPPY *Papaver spp.*

Sensuous luxurious flowers, about 2½-3' tall. Need light to germinate. Sow outside after frost or sow in fall for earlier blooms next summer. Thin to 9-12". Likes full sun. Will self sow. Seeds also useful in baking. Poppies make wondrous cut flowers: Choose buds that have straightened up but not quite opened. Immediately sear the cut stem—we use a lighter—and put in water. Poppies open after several hours—a sparse bouquet in the evening can become a riot of colors by the next morn. All types 200,000 seeds/oz.

5320 Carnation Our strain has gotten contaminated by crossing with other poppies. We hope to have restored purity for 2000. *Sorry, not available in 1999.*

5324 Elka An unusual double-purpose poppy sporting enormous seed heads up to 1½" wide and 2" high in good years, somewhat smaller in drought. About 75% of the seed heads are unvented so that the seed is not broadcast. From Chrenovec in central Slovakia, once used as a walnut substitute in their cuisine. Fifty or more years ago, families grew both the black Breadseed poppy and white-seeded Elka, and collected 50 kilograms of each for a year's cooking. When walnuts became widely available in stores, Elka almost completely disappeared. Named in honor of the old woman on a mountainside in Slovakia who is the last one left who continues to grow the variety in her area. Lacks the distinctive flavor of the Breadseed variety but is sweeter, with a more nutlike taste, none of the bitterness, and over 50% more oil content, making perhaps the best quality edible oil in central Europe. Plants grow 4' with white-lavender blossoms, like calcium-rich soil, don't transplant well. For best results thin to at least 5-6" apart. Some folks tie a group of plants together for support against wind breakage. Isolate from other poppies by at least 250' if you wish to save seed. Seed grown in Maine. A=.1g, ~700 seeds, B=.3g, C=1.2g.

5328 Ziar Breadseed Unusual twin to Elka, bred to eliminate the vents in its large seed head so the blue seeds stay in the heads to be collected. Ornamental single pink to red petals with centers ranging from pale red through dark colors. Although the first batch of seeds had some difficulty adapting to the cold climates of Canada and Maine, Ziar has been selected over the past 16 years for better cold survival. Slovakian variety once a mainstay in their cuisine. Seed grown in Maine without herbicides, pesticides or chemical fertilizers. A=.1g, ~700 seed, B=.3g, C=1.2g.

5330 Danish Flag According to legend, the Danish flag came from the sky to King Valdemar II in 1219. The origins of the *Danebrog* or Danish Flag poppy, are more obscure but it is an heirloom predating 1901. Flag is named for the white spots at the base of the petals which form a cross in the center of the brilliant scarlet flowers somewhat mimicking the Danish flag. The lush single blooms, more than 4" across with fringed petals, sit atop 27" stems with blue-green foliage. After their spectacular show, the flowers make attractive large seedheads ideal for drying. NEW! A=.2g, ~440 seeds, B=1g, C=7g.

5334 Large Lavender Passed along to Jeanne Griffin by a German friend, these tall poppies bloom in July with 2½-3" flowers that have exquisitely shaded and fringed petals. Long blooming period. Large 1" seed pods can be used in dried arrangements. Seed grown in Maine without herbicides, pesticides or chemical fertilizers. A=.2g, ~1,400 seeds, B=1g, C=7g.

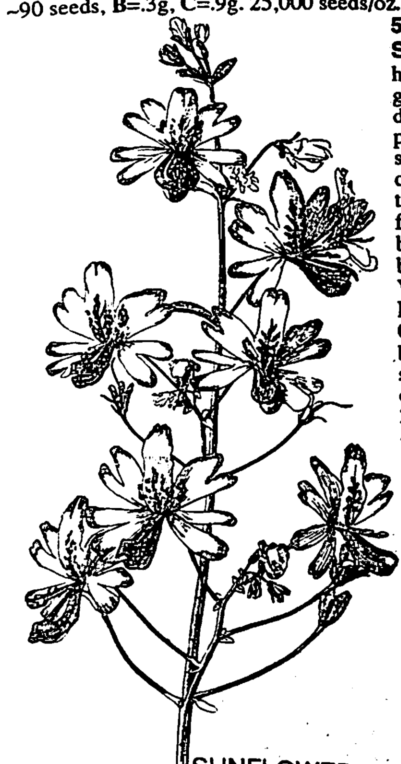
5346 Shirley Double Choice Mix Also known as Corn Poppy. Elegant blooms all summer in shades of pink, rose, salmon, scarlet and white. The name Shirley refers to the town in Surry, England, where the Rev. Henry Wilkes originally raised the variety. A=.7g, ~4,900 seeds, B=7g, C=28g.

5352 Mission Bells California Poppy *Eschscholzia californica* Colorful, semi-double 2-3" orange flowers, occasionally yellow or pink. Excellent for borders, rock gardens, bedding. Likes full sun. Do not transplant. Direct seed in May after soil has begun warming. Make succession plantings for blooms all summer. 2'. A=.5g, ~325 seeds, B=2g, C=6g. 18,300 seeds/oz.

Prices for annual flowers #5004-5497:
A=70¢, B=$2.00, C=$5.00.

5362 Salvia patens Hard to say whether magificent blue blossoms or dynamic flower shape is this salvia's most exciting feature. Clear bright flowers are one shade lighter than cobalt blue. Each flower on the monkshood-like spike has a top petal "hood" that lunges across the pendant lower petals. Nikos and Susan marveled at these 2½' plants at Rockefeller Gardens on Mount Desert Island. Flower spikes 12-15" long, good for cutting. Tender perennial, can be grown as an annual in the North. Start inside in February at 55-60°. Do not cover seed. Takes 21 days to germinate. Seed organically grown. A=.1g ~13 seeds, B=.3g, C=1.2g. 3,700 seeds/oz.

5363 Signum Blue Salvia *S. farinacea* If you want masses of true blue in your annual beds, Signum Blue is for you. Brilliant blue blossoms showed deeper color than Blue Bedder in our 1996 salvia trials. Compact 12-18" plants with grey-green foliage have long-lasting 6-8" high flower spikes that bloom all at once and last for weeks. Start indoors in a warm place 4-6 weeks before last frost. Do not cover seed. Plant outdoors after danger of frost. Keep fairly dry for best foliage color. Replaced Blue Bedder. A=.1g ~90 seeds, B=.3g, C=.9g. 25,000 seeds/oz.



5365 Angel Wings Schizanthus *S. pinnatus* Bring a hint of the exotic to your garden by growing this colorful array of delicate orchid-like flowers with pansy faces. Softly complementary shades of pink, violet and rose with contrasting blotched and stippled throats create the effect of an 18" fern covered by rare little butterflies. Bring cut sprays of bloom indoors for a touch of Victorian charm. Also known as Butterfly Flower or Poor Man's Orchid. Do not cover the fine seed, but do cover the flats or pots with a sheet of black plastic because darkness aids germination. Takes 3-4 weeks to germinate. A=.2g, ~390 seeds, B=1g, C=5g. 55,000 seeds per oz.

5374 Dwarf Ten Weeks Mix Stock *Matthiola incana* Formula blended. Dwarf plant reaches 12-14". Each produces abundant flowers which really come into their own in the cool of September. Light and dark blue, white, pink and red blossoms for bedding and cutflowers. For earlier blooms sow indoors 6 to 8 weeks before setting out after danger of frost. Don't cover the seed. A=.4g, ~250 seeds, B=2g, C=12g. 18,000 seeds/oz.

SUNFLOWER *Helianthus annuus*

Native to the Americas and revered by Peruvian Incas, sunflowers are enjoying a tremendous popularity revival. Thanks to the folks at Loon Song Farm, who have trialed over 40 different varieties for us since 1994, we've diversified our selection so that you can enjoy a full range of colors, shapes, heights and bloom times. Prized for their seeds by humans and birds, sunflowers also add a lighthearted touch to gardens. Prechilling seed aids germination. Easy to grow. Direct sow after last frost, 3 to a pocket. Thin to best plant, 1' or more apart. Rich friable soil yields tallest plants, drought stunts growth. See also **#5668-5669**.

1# prices not listed on the grid form, see p. 6 for bulk ordering instructions.

5400 Autumn Beauty Mix Tall 6-8' multibranching sunflower produces a lovely mixture of earthen shades. Petal colors range from bright yellow to bronze and purples; most have a characteristic red ring enclosing a black center. Blossoms 4-6" across are perfect as the center of giant flower arrangements. Has pollen. A=1g, ~45 seeds, B=4g, C=28g, D=1lb, $28.00. 1,300 seeds/oz.

5404 Floristan *Not available in 1999. We recommend #5668 Prado Red.*

5408 Mammoth Grey Stripe A traditional variety of giant (6-12') single-stem sunflower with large seed heads. Beloved by birds and kids. A=28g, ~250 seeds, B=84g, C=336g, D=1lb, $6.00.

5410 Lemon Queen Tall Lemon Queen is a winner from Donna Dyrek's 1997 sunflower trials. Luxuriant 8" blooms with lemon yellow petals surrounding striking solid brown centers. Although it can grow up to 10' tall in rich soil, its powerful stems do not lodge. Likes high fertility; makes shorter stems and narrower petals in average soil. Not early; bloomed for Donna in late August. A=1g ~45 seeds, B=5g, C=20g, D=1lb, $25.00. 1,270 seeds/oz.

5412 Primrose This polyheaded wind-resistant sunflower is perfect for cutflowers. It bears 4-5" lemon-yellow petals with attractive brown centers which hold their blooms for a long time. About 5-7'. Hulls ran purple color during our germ tests; can be used for dying. A=1g, ~20 seeds, B=5g, C=20g, D=1lb, $40.00. 560 seeds/oz.

5416 Schnittgold Contrast is the watchword for this handsome single-headed 5' sunflower. Its double ring surrounded by deep yellow petals makes a striking display. The center pollen ring is black and flat, surrounded by an auxiliary ring of brown. "Schnitt" means "cutting" in German; the variety makes a superb cutflower. Karen Pratt, of Wilmington, VT, points out that Schnittgolds, when mature, get a hollow in the center—perfect for making the sunflower bird wreaths sold in pricey garden catalogs. 8-10" blooms. A=1g, ~25 seeds, B=3g, C=12g. 700 seeds/oz.

5420 Selma Suns Mix Trialer Donna Dyrek rates these her favorite sunflowers for their fragrance, beautiful diversity, and plethora of polyheading 6" blooms. Selma's heads have small dark centers, pointed petals, and display various hues and shades including yellows, golds, maroons and reds. Dyrek reports that Selma "flowers forever if the squirrels don't rip off the heads." Stalks grow 6-7'. A=1g, ~55 seeds, B=3g, C=12g, D=1lb, $35.00. About 1,560 seeds/oz.

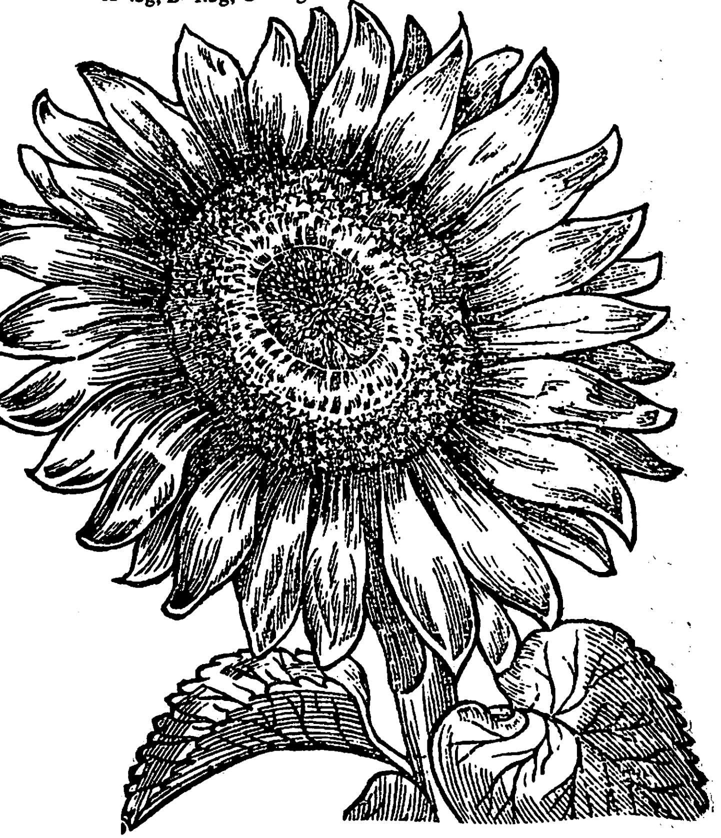
5424 Sunbeam F-1 hybrid. Van Gogh might have been imagining this variety when he produced his magnificent work. Sunbeam's spectacular 4" green center is truly spellbinding, especially alongside its thin second ring of burgundy framed by its big rich golden-yellow petals which merge to yellow-green disks that slowly change color to yellow then brown as the plants mature. No other sunflower in our trials had a comparable pollen-free green center. Single headed on 5-5½' stalks. From Sakata in Japan. A=.5g, ~10 seeds, B=1.5g, C=6g. 560 seeds/oz.

5428 Sungold Dwarf A Danish variety which was the best of the Teddy Bear-types in our trial and much nicer than the original Teddy Bear. Polyheaded blooms growing on very short stems (the main stalk is only 2') are fully double giving the fuzzy effect. Habit almost like a well-behaved dahlia. Drew much attention and many comments at our sunflower display at Common Ground Fair in 1994. Blooms hold well compared to other dwarf types. Has pollen. A=1g, ~50 seeds, B=3g, C=12g, D=1lb, $55.00. 1400 seeds/oz.

5432 Sunspot With Sunspot you can bring the cheer of sunflowers indoors during those long cold winter months. Grow this dwarf 2½' plant in a container in your house! Although its stem is relatively diminutive, its 8" flowers are anything but puny, and look like traditional sunnies—yellow with a dark center. For good growth choose a warm sunny location, indoors or out. You may need to provide some support as Sunspot approaches maturity. A=.25g, ~5 seeds, B=1g, C=3g, D=1lb, $35.00. 560 seeds/oz.

5436 Vanilla Ice *H. debilis* Imagine a screening hedge of white sunflowers! These 5' stalks set blossoms with creamy white petals surrounding a rich, dark brown disk. Polyheaded and similar to the better-known Italian White, but a superior performer in our trial. A=.2g, ~45 seeds, B=.6g, C=2.4g. 6,250 seeds/oz.

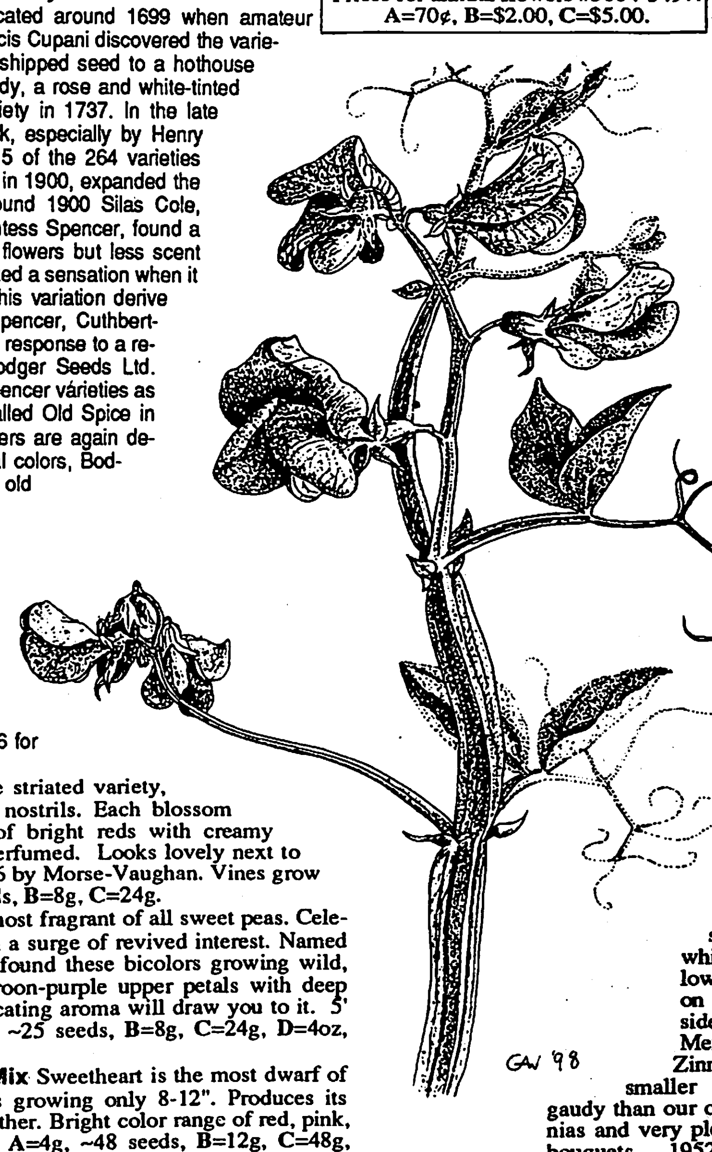
5439 Sunflower Sampler For those who wish to get in on the sunflower rage without spending a pile of jing, we'll mix seed for a half dozen or so varieties into one package. Create a lovely display for 70¢. No dwarfs or mammoths. A=.5g, B=1.5g, C=4.5g.



Prices for annual flowers #5004-5497:
A=70¢, B=$2.00, C=$5.00.

SWEET PEA *Lathyrus odoratus*

Native to Sicily, first domesticated around 1699 when amateur botanist and monk Father Francis Cupani discovered the variety which bears his name and shipped seed to a hothouse grower in England. Painted Lady, a rose and white-tinted pink, was the first named variety in 1737. In the late 1800s extensive breeding work, especially by Henry Eckford who accounted for 115 of the 264 varieties exhibited at the Crystal Palace in 1900, expanded the range of available colors. Around 1900 Silas Cole, gardener to the Earl and Countess Spencer, found a sport with much larger ruffled flowers but less scent than Eckford's varieties. It created a sensation when it was exhibited in 1901. From this variation derive all modern strains including Spencer, Cuthbertson, Knee-Hi and Mammoth. In response to a revived interest in fragrance, Bodger Seeds Ltd. obtained as many of the pre-Spencer varieties as possible and created a mix called Old Spice in the 1970s. Now, when gardeners are again demanding fragrance in individual colors, Bodger has begun to offer the old strains individually.



Soak seeds for 12-24 hours prior to sowing. For earliest blooms, sow indoors 2 mos. before setting out, or sow direct in spring. Likes full sun and moist rich soil. About 350 seeds/oz. Perennial sweet pea is **#6296**.

4oz and 1lb prices are not listed on the grid form, see p. 6 for bulk ordering instructions.

5440 America An antique striated variety, arresting both to eyes and nostrils. Each blossom contains subtle variations of bright reds with creamy white streakings. Heavily perfumed. Looks lovely next to Cupani. First offered in 1896 by Morse-Vaughan. Vines grow to 3'. NEW! A=2g, ~25 seeds, B=8g, C=24g.

5441 Cupani Oldest and most fragrant of all sweet peas. Celebrating its 300th birthday in a surge of revived interest. Named for the Sicilian monk who found these bicolors growing wild, Cupani combines deep maroon-purple upper petals with deep blue lower petals. Its intoxicating aroma will draw you to it. 5' vines. 340 seeds/oz. A=2g, ~25 seeds, B=8g, C=24g, D=4oz, $12.00.

5442 Little Sweetheart Mix Sweetheart is the most dwarf of all sweet peas, with bushes growing only 8-12". Produces its best blooms in cool fall weather. Bright color range of red, pink, white, rose, lilac and blue. A=4g, ~48 seeds, B=12g, C=48g, D=4oz, $8.00. 340 seeds/oz.

5448 Knee High Mix Semi-dwarf 20" bush-type plants need no support, produce full-length stems. A=7g, ~78 seeds, B=28g, C=84g, D=1lb, $16.00.

5454 Mammoth Mix 4-6' staking variety. The best tall mix in our many gorgeous trials. Though temporarily slowed by heat waves, revives during each cool spell and never stops blooming from July to September. Long stems make ideal cutflowers. Mixture of crimson, scarlet, white, lavender, deep rose, medium blue and pink. The purples and reds are the most fragrant. A=7g, ~85 seeds, B=21g, C=63g, D= 1lb, $18.00.

5457 Perfume Delight We're always seeking sweet peas with more fragrance, and Perfume Delight delivers. Vines to 3' require staking. Slow bloomers with medium-long stems in a mixture of colors. Fill your gardens and rooms with perfume! A=4g, ~48 seeds, B=12g, C=48g, D=1lb, $22.50.

VENIDIUM *V. fastuosum*

Also known as Namaqualand Daisy or Monarch of the Veldt. (Namaqualand is in southwest Africa.) Daisy-like flowers with attractive contrasts. Don't let its multibranching habit and deep-cut fuzzy leaves distract you. Sprawling 2½' plants prefer a dry sunny location, are intolerant of wet feet. Will look good next to Cynoglossum or Euphorbia. Start indoors, transplant out after danger of frost. Keep deadheaded for long bloom production. Space at least 2' apart. 26,000 seeds/oz.

5460 Exotic Spellbinding deep black centers ringed with bright orange petals edged in black. A=.1g, ~90 seeds, B=.3g, C=1.2g.

5461 Zulu Prince Glorious creamy-white 4" flowers with vivid black centers. NEW! A=.1g, ~90 seeds, B=.3g, C=1.2g.

5462 Purple Top Verbena *V. bonariensis* One look was all I needed to fall in love with this free-flowering verbena. Don't confuse it with the hybrid dwarf bedding plant (which is available at #5672-76). Proud strong 3-4' stems almost without leaves covered with vibrant purple flowers which thrive in heat and bloom from July to October. Makes an ideal cutflower. A=.1g, ~400 seeds, B=.4g, C=2g. 113,000 seeds/oz.

ZINNIA *Z. elegans*

These showy annuals were named for 18th century German botany professor Johann Gottfried Zinn. One of the easiest to grow from seed, and a favorite for bright color in Maine summers. Zinnia flower essence is used to bring out playfulness and lightheartedness. Cut when flowers are fully mature. Deadhead to continue production. Sow in a sunny spot after last frost, or start indoors for earlier blooms. See also **#5690**.

4oz size not listed on grid form, see p. 6 for bulk ordering instructions.

5468 Blue Point Formula Mix The most elegant giant dahlia-flowered zinnias we have ever grown, absolutely superb in the 1998 trial when the combination of low rainfall and good heat in late summer created optimal conditions. Densely petaled fully double flowers regularly exceed 4" across, showy yet extremely refined, borne on long stems perfect for cutting. Highlighted by the uniform petal patterns, colors are particularly bright from yellow, orange and white to scarlet, rose-pink and magenta. Will hold better than most even under the stress of high heat and rainfall. 3-3½' plants. The Zinnia of choice for market growers; on a par with State Fair Mix for home gardeners. Highly recommended by Lynn Byczynski in The Flower Farmer (#6544) NEW! A=.5g, ~50 seeds, B=1.5g, C=9g, 2,800 seeds/oz.

5470 Cactus Mix Large ruffled blossoms resemble chrysanthemums. Profuse immense blooms in scarlet, orange, pink, yellow. Full sun. 3'. A=1g, ~105 seeds, B=7g, C=28g, D=4oz, $10.00. 3,000 seeds/oz.

5474 Gold Medal Mix A formula blend of cherry, orange, pink, purple, scarlet, white and yellow dahlia-flowered blossoms 4-5" across excellent for cutting. Flowers are flat-petaled, semi-double on 3½' stems. Bred by Bodger. A=1g, ~105 seeds, B=7g, C=28g, D=4oz, $10.00. 3,000 seeds/oz.

5478 Persian Carpet *Z. haageana* These variegated fully double and semi-double 2" flowers borne on 1' stalks hold a long time. They have maroon centers, with white, yellow or gold on the outside. This Mexican Zinnia is smaller and less gaudy than our other zinnias and very pleasing in bouquets. 1952 AAS. A=.5g, ~400 seeds, B=5g, C=20g. 22,000 seeds/oz.

5482 Pumila Mix (Cut & Come Again) Small 2' plants with flowers 2½-3" across. Wide range of colors includes orange, yellow, white, pink, lavender and scarlet. A=1g, ~140 seeds, B=7g, C=28g, D=4oz, $10.00. 4,000 seeds/oz.

5486 Scarlet Flame Even Gene, who doesn't like gaudy zinnias, was attracted to Scarlet Flame's elegant bright scarlet blooms. 3' stems. A=1g, ~110 seeds, B=7g, C=28g, D=4oz, $10.00. 3,100 seeds/oz.

5490 State Fair Mix Old-fashioned variety bears a rich array of huge single and double blooms on 30" plants. The blooms are much showier than those in the Gold Medal Mix. Staffer Susan Kiralis loves their intense fully saturated reds and magentas. A=.5g, ~50 seeds, B=2g, C=12g, D=4oz, $16.00. 3,000 seeds/oz.

5493 Swirls Zinnia These zinnias wowed everyone who saw them in our 1992 trials with their slightly fluorescent bicolor blooms of rose and white or red and yellow. The 4" flowers are fully double to semi-double with slightly ruffled flat petals borne on 2' stems. A=1g, ~190 seeds, B=7g, C=28g, D=4oz, $10.00. 5,400 seeds/oz.

5497 Cutflower Mix A mixture of annual flowers which can be used for cutting. Includes popular types such as aster, bachelor's button, calendula; also some lesser-known kinds. A=1g, B=14g, C=56g.

FANCY ANNUALS

Prices of Fancy Annuals (#5506-5690): A=$1.80, B=$6.00.

A selection of higher-priced annuals, many of which are especially recommended for commercial growers.

Seeds per packet for flowers are approximate. They are intended as guides, not guarantees, because we pack by weight, not by count. Available in two sizes except where noted. **Packet weights are listed with each flower.**

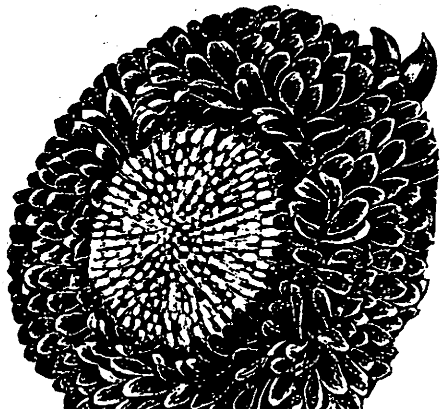
Flowers are arranged here by common name. See page 48 for a chart of common uses and an index of botanical names.

AGERATUM *A. houstonianum*

Showy annual also known as Flossflower. Great for summer borders. Water in hot weather. Will not tolerate frost. Start indoors 6-8 weeks before last frost. Cut for vase when flowers are first opening.

5506 Blue Blazer F-1 hybrid. Puffy deep blue flowers on 8" plant. Very popular for borders and bedding. Starts blooming early, can withstand heat and continue into fall. A=.05g, ~350 seeds, B=.2g. 200,000 seeds/oz.

5510 Blue Horizon F-1 hybrid. A long-stemmed cutting variety for everyone who loves ageratum and wants to bring them inside. The more you cut them the more they flower. Lasts a week in the vase. Works well as an everlasting when dried. Grows 30" with blue flowers. A=.04g, ~150 seeds, B=.2g. 170,000 seeds/oz.

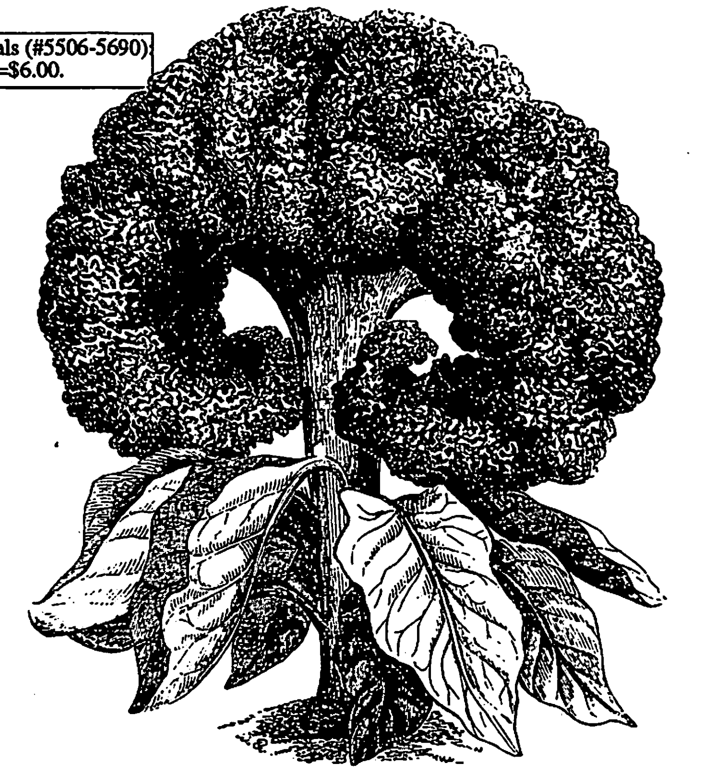


5514 Matsumoto Aster *Callistephus chinensis* A very classy cutflower which may be harvested by the individual stem or in its entirety. Flowers sport distinct yellow centers amidst a variety of shades (apricot, blue, pink, red, rose, salmon and white) about 100 days after sowing. 2" semi-double blooms are concentrated at the top of strong 2$^{1}/_{2}$' stems. For other asters see #5024-5044. A=.2g, ~90 seeds, B=3g. 13,000 seeds/oz.

5518 Nonstop Tuberous Begonia *Begonia tuberhybrida* F-1 hybrid. A boisterous mix of flamboyant color to awaken your garden! Nine shades; from pink to fiery red, apricot to golden orange, plus yellow and white, create a riot of color in a shady garden border or in hanging pots. Europe's #1 windowbox plant sports showy 3$^{1}/_{2}$-4$^{1}/_{2}$" fully double blooms on vigorous basal-branching stems. Thuja Gardens' lovely display outside their main lodge in Northeast Harbor, ME provided us with the inspiration to list them. They like shade, will tolerate a bit of sun. Start indoors, set out after all danger of frost. Needs 75° to germinate; takes 2-3 weeks. Blooms 140 days after sowing. Pelleted seed. Packed by seed count, not weight. NEW! A=10 seeds, B=50 seeds

5520 Kiwi Blue Cerinthe *Cerinthe major* var. *purpurescens* Little-known bushy annual 12-18" which really comes into focus in late summer and early fall when the cooler nights accentuate its colors. The grey-green foliage is as interesting as the profuse blue shrimp-like bracts which bear a myriad of purple flowers. Tolerates heat, but likes cool weather and will withstand light fall frosts, looking best when others are fading. Would make a superb massed border. My good friend Heidi Cooperstein, who knows a thing or two about flowers, was really attracted to this one. Thanks to Hillary Nelson in New Hampshire who offered Cerinthe in her seed exchange and piqued my curiosity with her vivid description. Start indoors 6-8 weeks before setting out after danger of frost. Takes about 15 days to germinate. NEW! A=.6g, ~9 seeds, B=2.4g, 420 seeds/oz.

5522 Chick-a-Biddy *Asarina scandens* This old-fashioned climber is making a comeback. Fresh green small-leaved foliage and masses of 1$^{1}/_{4}$" lavender or dark purple trumpet-shaped flowers can rapidly fill a 4' trellis. Sow early for quick blooms which will continue in flushes until frost. Its self-twining habit makes it ideal for topiary. Also does well in hanging baskets or climbing from the ground. Surface sow or barely cover after danger of frost is past. Seed organically grown in Maine. A=.01 gram ~40 seeds, B=.04g. 4,000 seeds/g.



COCKSCOMB *Celosia cristata*

Sow indoors in peat pots 4 weeks before last frost. Too-early seeding and cold temperatures can cause premature flowering. Seedlings sensitive to both drying out and damping off; apply even moisture. Pinch early heads to induce branching. See also #5726-5732.

5526 Apricot Brandy *C. c. plumosa* AAS. Compact 12" plants ablaze with very uniform apricot-orange plumes. Needs light to germinate. A=.1g, ~115 seeds, B=2g. 32,000 seeds/oz.

5530 Coral Gardens An extra-dwarf brain-type growing fairly large flowers on compact 10" plants. Blooms display a rich mix of red, crimson, rose, orange and gold with an almost neon glow. Be prepared when people approach your 6-pack annuals and ask "Do you have any brains?" A=.1g, ~120 seeds, B=2g. 34,000 seeds/oz.

5552 Versailles Pink Eye Cosmos *C. bipinnatus* Caught our attention because it was a foot shorter and a week earlier to bloom than Early Sensation. Petals light pink at the tips darkening as they approach the yellow centers. Prolific blooms good for cutting. For other cosmos, see #5136-40. A=1g, ~135 seeds, B=4g, C=1oz, $20.00, not on the grid form, see p. 6 for bulk ordering instructions. 3,900 seeds/oz.

5558 Figaro Dahlia *D.* x *hybrida* Named for Swedish botanist Andreas Dahl. Early and compact, with a wide range of flower forms, including single, semi-double and double blooms. Colors include red, rose, mauve, violet, orange, salmon, yellow and white. Dahlia is sensitive to day length. If sown in March or April needs to be shaded for 10 hours/day during the first four weeks after emergence. Transplant after frost. 10". A=.4g, ~40 seeds, B=2g. 2,800 seeds/oz.

FLOWERING KALE *Brassica oleracea*

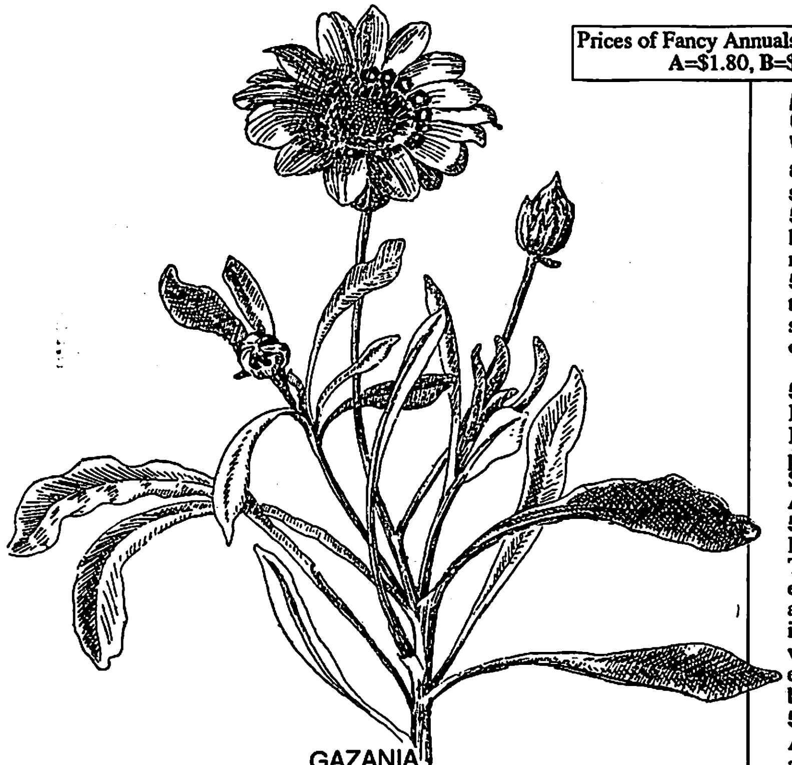
Sometimes used for garnishes or in salad mixes. 10,000 seeds/oz. See also #5160.

5566 Red Chidori F-1 hybrid. Flowering kale is called *Ha-Botan* in Japan, meaning "leafy peony." The Japanese are world leaders in hybridizing this species and, in Red Chidori, they have brought their work to its ultimate expression. Of all our trial varieties, Red Chidori had the brightest purple outer leaves and the sharpest red centers. These colors reach their apex shortly after frost when other garden hues are fading. Red Chidori leaves have finely ruffled edges which further accent their beauty. A=.2g, ~70 seeds, B=1g.

5568 Red Peacock F-1 hybrid. An unusual flowering kale with an open plant habit and large lacinated leaves. Can grow enormous (1$^{1}/_{2}$' high and 2' wide), looking a little like a brightened version of Red Russian Kale on steroids! Very stately in the late summer and fall garden. **BACK!** A=.2g, ~70 seeds, B=1g.

5570 Flower of the Hour *Hibiscus trionum* So-called because each showy bloom lasts one day, but the bushy 2' tall plants are covered with buds so the effect is free-flowering. Creamy-white 3" five-petaled flowers with burgundy eye. Hardy annual blooms from August through light frosts. Not bothered by beetles as are other mallows. Old Sturbridge Village lists it as a pre-1800 heirloom also known as Bladder Ketmia. Plant in groups in full sun, may be direct seeded. Seed organically grown in Maine. **NEW!** A=.2g, ~50 seeds, B=.8g.

Prices of Fancy Annuals (#5506-5690): A=$1.80, B=$6.00.



GAZANIA

Named for Theodore of Gaza, a medieval translator of botanical works. Easy to grow and excellent as low border plants. Bright daisy-like flowers tend to close in shade or cloudy weather so gazanias will be most pleasing planted in full sun. 14,000 seeds/oz.

5572 Chansonette *G. splendens* Back with an improved color range, these early blooming compact plants exhibit an array of clear bright colors including pink, orange, bronze, white and yellow. Easy to grow and excellent as low border plants. A=.2g, ~100 seeds, B=1g.

5573 Daybreak Mix *G. rigens* A very early mix of brilliant gazanias which includes two Fleuroselect Gold Medal winners, Red Stripe, a bright yellow with red stripes that gives the effect of a sunrise, and Bright Orange. Other shades include Garden Sun, Bronze, Bright Yellow Improved, pink and white. Red Stripe really stood out in my 1998 trial. Compact 8-10" plants. NEW! A=.05g, ~25 seeds, B=.25g.

5576 Marine Heliotrope *Heliotropium arborescens* Native to Peru, an old-fashioned scented flower with a rich history. It was "to be sown in the Spring, a delicious flower...the smell rewards the care," wrote Thomas Jefferson. The aroma fills the garden on a cool, damp day. Victorian-era rose beds were often edged with heliotrope and it is still cultivated in Europe as a fragrance for perfumes. Smells like sweet violet, but deeper, and has been described as similar to vanilla, almond or cherry pie. Works well in hanging baskets or containers as well as in the front of borders—any location where the scent will readily reach you. It may be transplanted indoors for the winter. 14-18" plants with deeply etched viburnum-like dark green leaves bear big flat clusters of tiny star-shaped royal blue flowers. Somewhat slow, erratic germinator. Pkt.=.1g, ~150 seeds, B=.6g. 42,500 seeds/oz.

5582 Pink Swirl Mix Impatiens *I. wallerana* Formerly known as Super Elfin Pastel Mix. 8-10" freely branching plants covered with masses of pastel colors: blue pearl, pink with a rose eye, salmon with a coral eye, white, coral, pink and salmon. Impatiens are the nation's #1 bedding plant because they do so well in shade and require so little care. Start indoors. Provide even moisture; do not overfeed. Need light to germinate. A=.03g, ~55 seeds, B=.15g. 50,000 seeds/oz.

MARIGOLD *Tagetes* spp. See also #5228-5252.

5601 Ornament Gem *T. tenuifolia pumila* A third gem in our series of edible signets, studded with multiple tiny fragrant maroon blooms. A=.2g, B=1g.

5606 Queen Sophia French Dwarf Double *T. patula*. Award-winning anemone-flowered dwarf. Each plant produces many bicolored blooms. Flowers are deep orange rust and, as they mature, petals are edged with gold. Named for Queen Sophia of Spain. 10-12". A=.7g, ~230 seeds, B=3.5g.

5610 First Lady African Semi-Dwarf Double *T. erecta* Voted the favorite AAS flower. A lovely 20" border or hedge plant, covered with sunny yellow double carnation-like flowers 3$^{1}/_{2}$" across which keep coming till frost. A=.1g, ~35 seeds, B=1g.

5616 Inca Orange African Semi-Dwarf Double *T. e.* A wonderful home garden marigold completely blanketed with big 4-5" flowers on full 14" plants. The blooms are fully double, start early, and keep going all summer unless they get waterlogged in a storm and break off. A=.1g, ~32 seeds, B=.6g.

DATURA *D. inoxia*

Also known as Angel's Trumpet or Tolguaca. *This plant is poisonous and no part of it should ever be ingedsted.* Its effects are described by Carlos Castenada in The Teachings of Don Juan. This close relative of Jimson Weed will be a real conversation piece in your garden. Pods are useful in dried arrangements. Poor germinator; disturb the seedbed in your flats weekly to stimulate sprouting. 2,300 seeds/oz.

5622 Moon Lily Of spectacular beauty, growing 3' tall and spreading with huge 6" white trumpets of indescribable ambrosial fragrance which open at night. A=.25g, ~20 seeds, B=2g.

5623 Violet Moon Lily has enjoyed great popularity so we've added a twin. Perfumy night-blooming trumpets similar to Moon Lily but with smaller single purple flowers. Seed originally from J. L. Hudson, organically grown by Susan Belding. NEW! A=.25g, ~20 seeds, B=1.5g.

5625 Peach Melba Nasturtium *Tropaeolum minus* Recommended by Eva Sommaripa and other growers who treasure its unique delicacy. Primrose-cream blossoms with pearly red centers look like miniature cut peaches. It sets its abundant blooms above the compact lily-pad foliage. Seed is expensive but worth it. For other nasturtiums see #5280-5296. A=1g, ~8 seeds, B=4g. ~225 seeds/oz.

5628 Only the Lonely Nicotiana *N. sylvestris* Named in honor of John Nicot, who introduced tobacco to France. Also known as Woodland Tobacco. For years we looked for a nicotiana whose fragrance was deep enough to allow us to overlook the plant's gangliness. The dwarf varieties always let us down. But this stately 5' variety looks almost handsome, and its powerful fragrance perfumes the garden both day and night. You might want to plant it near a door or under your bedroom window where you can enjoy the smell during the night. Clusters of drooping tubular white blossoms. A=.02g, ~640 seeds, B=.4g. 911,100 seeds/oz.

5632 Jolly Joker Pansy *Viola* x *wittrockiana* All-America winner. Although it lacks the usual "face," its vibrant color combination of orange and purple will make you take notice. One of the hardiest pansies, as well as one of the slowest to "stretch." 8". A=.1g, ~70 seeds, B=.5g. 20,000 seeds/oz.

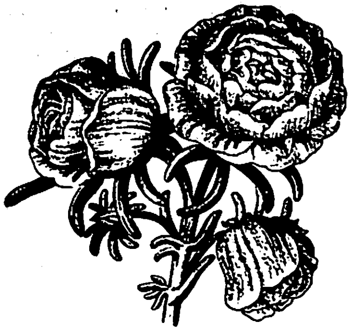
PETUNIA *P. x hybrida*

Start indoors in warm place 8 wks before setting out after danger of frost. Do not cover seeds; light aids germination. Use loose medium and avoid overwatering. 280,000 seeds/oz.

5638 Daddy Mix F-1 hybrid. This very showy grandiflora has big 4" ruffled blooms in shades of light blue, orchid, peppermint, pink, plum and strawberry with darker veins. Stunning in baskets, these uniform plants also exhibit good weather tolerance when planted in full sun. 12-15". A=.03g, ~300 seeds, B=.12g.

5642 Pink Wave F-1 hybrid. The Wave has caught on with our customers. We offer the pink, with white throats, to complement the purple. Pelleted seed. Packets by seed count. A=~10 seeds, B=~50 seeds.

5644 Purple Wave F-1 hybrid. If you've given up on petunias because they're "wimpy" or require too much fussing, try these. Each plant carpets the ground with a spread of 4x4' of vivid fuchsia. Wave showed extreme drought tolerance in our 1995 trial, sailed through light frost and bounced back after torrential rain. Although never deadheaded or cut back, the 3" flowers just kept coming and coming and coming. If you're looking for one to grow in containers or you need to cover a lot of ground or you just want a beautiful sea of color, try Wave. 1995 AAS. Pelleted seed. Packets by seed count. A=~10 seeds, B=~50 seeds.



PORTULACA *P. grandiflora*

The familiar Moss Rose is good in hanging planters and most colorful in massed plantings. Easy to grow, can stand heat. Start in a warm spot. Needs light to germinate. Thrives in sandy soil, likes full sun, blooms 8 weeks from sowing. Blossoms close in cloudy weather and late afternoons. 295,000 seeds/oz.

5652 Sundial Mix A dramatic improvement in this South American native, exhibiting early blooming of large 2" fully double flowers which stay open longer than other mixes. During the 1995 drought, Sundial excelled, providing a vivid array of cream, fuchsia, gold, peppermint, orange, pink, scarlet, white and yellow on succulent low-spreading 6" plants. Honored as Australia's 1991 Flower of the Year. A=.01g, ~105 seeds, B=.05g.

5656 Sundial Peppermint An arresting color combination of light pink brushed with streaks of deep rose evokes an old-fashioned peppermint stick. Our favorite strain in the Sundial mix above. A=.01g, ~105 seeds, B=.05g.

5662 Cleopatra Scarlet Salvia *Salvia splendens* Very bright scarlet blooms on dense 6" flower spikes attract hummingbirds and hold longer before fading than Carabiniere. Compact well-branched 1' plants exhibit very uniform habit and timing. Traditionally used as a bedding plant. Cut the initial flower spikes after they fade to induce further flower development. These bushy floriferous bedding plants are day-length sensitive so must be started early. Replaced Carabiniere. A=.2g, B=1g.

Prices of Fancy Annuals (#5506-5690): A=$1.80, B=$6.00.

SNAPDRAGON *Antirrhinum majus*

See also **#6884.** Refrigerate seeds, then expose to light to germinate. Sow indoors in cool place 8-10 weeks before setting out.

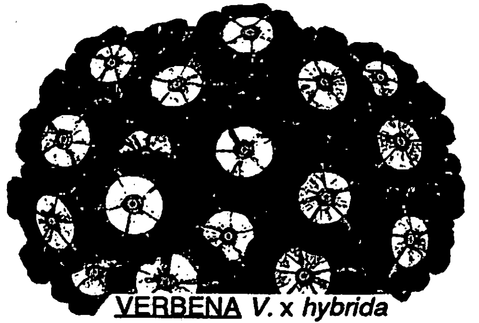
5665 Rocket Mix F-1 hybrid. The standard snapdragon for cutting because of its long stems and vibrant colors. Come in pink, red, yellow, orange, white and orchid. Replaces Panorama which it outperformed in our trial. NEW! A=.025g, ~145 seeds, B=.125g, 165,000 seeds/oz.

5666 Sonnet Mix F-1 hybrid semi-dwarf. A standout in our trials, with blooms refined, early and in a full range of very bright colors. Annual grows 20". *Seed in short supply.* A=.025g, ~50 seeds, 180,000 seeds/oz. *Available only in size A.*

SUNFLOWERS *Helianthus annuus* See also **#5400-5439**

5668 Prado Red Fleuroselect novelty winner. The best red sunflower in Donna Dyrek's trials, specially bred in Holland for the cutflower trade, featuring long, long stems. Its brown center disks are surrounded by small rich velvety maroon-red petals which extend the range of sunflower colors. Each 4' multi-branching plant bears 15-18 long-lasting flowers that shed pollen sparingly. Would make a striking contrast planted alongside Vanilla Ice. A=.5g, ~13 seeds, B=2g, C=1oz, $25.00, not on grid form, see p. 6 for bulk ordering instructions. 710 seeds/oz.

5669 Prado Gold Fleuroselect quality winner in 1993. Golden yellow twin to Prado Red except Gold's brown center has a green indentation at the bullseye. Like Prado Red, multibranching and early to bloom. Enjoy these in rich-hued bouquets. A=.5g, ~13 seeds, B=2g, C=1oz, $25.00, not on grid form, see p. 6 for bulk ordering instructions. 710 seeds/oz.



VERBENA *V. x hybrida*

Starry flower clusters cover this 6-10" hybrid annual bedding plant. Free-flowering, long-lasting blooms make a stunning vibrant border. Chill seeds 5-7 days in refrigerator before sowing. 10,000 seeds/oz.

5672 Novalis Deep Blue with Eye F-1 hybrid. Purple blooms with white starlike centers. 1989 AAS. A=.2g, ~70 seeds, B=1g.

5676 Novalis Scarlet with Eye F-1 hybrid. We liked the blue so much that we decided to trial Novalis Mix. The blue and scarlet work so well together in the mix that we opted to carry each individual color. Interplanting the two will give you a striking border. A=.2g, ~70 seeds, B=1g.

5682 Peppermint Cooler Vinca *Catharanthus rosea* Wanted: A low maintenance 8" bedding plant that stands up to the worst heat and drought and is rarely bothered by insects or diseases while blooming profusely from July until frost! Common alias: Madagascar Periwinkle. Frequent whereabouts: Blending into gardens or brought indoors as everblooming houseplants. Relatives: The common vinca or creeping myrtle. Resembles: Impatiens. Last seen: In Fedco Seeds fancy annuals section **# 5682**. Reward: 2¼" white blooms with a red "eye" and overlapping petals with a rounded formal appearance. Remains neat and covered with blooms until frost. A=.2g, ~150 seeds, B=1g. 21,000 seeds/oz.

5690 Ruffles Mix Zinnia *Z. elegans* F-1 hybrid. Bred for bouquets. Flat-petaled, double to semi-double flowers on long stems. Free blooming, respond to frequent cutting. Yellow, scarlet, pink and cherry blooms. Form an elegant hedge 24-30". Very refined. For other zinnias see **#5468-93.** A=.15g, ~15 seeds, B=.6g. 3,000 seeds/oz.

Prices for everlastings #5705-5982: A=70¢, B=$2.00, C=$5.00.

EVERLASTINGS

Seeds per packet for flowers are approximate. They are intended as guides, not guarantees, because we pack by weight, not by count. Available in three sizes except where noted. **Packet weights are listed with each flower.** See also **#6888.** Flowers are arranged here by common name. For a chart of common uses and an index of botanical names, see page 48. Annuals except where noted.

5705 The Pearl Achillea *A. ptarmica* This hardy perennial bears no resemblance to wild yarrow. Instead it has individual clusters of fully double pure white blooms with a small yellow center, almost like a large double Baby's Breath. Easily cultivated, it spreads readily and makes an effective "wild" border. Makes fine cutflowers from spring until frost, enjoyable either fresh or dried, adding an engaging splash of white to arrangements. Zones 3-10. 2'. A=.05g, ~350 seeds, B=.15g, C=.6g. 200,000 seeds/oz.

5710 Acroclinium *Helipterum roseum* Also known as Sunrays. Daisy-like flower which may be used fresh as cutflower. Pick in bud stage; will open as it dries. White, rose and pink shades. Start in cool place 2 mos. prior to setting outdoors, or sow direct outdoors after frost. Annual. 2'. A=.2g, ~100 seeds, B=.6g, C=2.4g. 12,600 seeds/oz.

5714 Bells of Ireland *Moluccella laevis* Sets spikes of bright green bell-shaped "flowers" atop 2½' branching stems. Each green bell is really a showy inflated calyx with a tiny pinkish flower inside. When dried, bells turn creamy white. Chill seed at 50° for 5 days. Start indoors in cool place 6-8 weeks before setting out. Needs light to germinate. Likes partial shade; thrives in cool climates. Last offered by Fedco in 1984. **BACK!** A=1g, ~150 seeds, B=3g, C=15g, 4,200 seeds/oz.

5716 Blazing Stars *Liatris spicata* Perennial also known as Gayfeather. 18" spikes of rosy purple flowers for cutflowers or drying. Start indoors in late winter in cool place and set out in spring in 6-8 weeks or direct seed in spring. Takes 3-4 weeks to germinate. Zones 3-9. A=1g, ~330 seeds, B=5g, C=15g. 9,500 seeds/oz.

5720 Green Gold Bupleurum *B. griffithii* Although not well known except in Dutch flower auctions where it commands a price similar to roses, this unique plant with yellowish flowers and round leaves is gaining attention from dried flower growers. Its well-branched 2' stems air-dry perfectly, retaining their green color and looking like they had been dried in glycerine. Moreover, because each stem fans out, an individual stem provides backdrop for an entire arrangement, either fresh or dried. Start indoors early to reach full growth potential. A=.2g, ~70 seeds, B=.6g, C=6g. 10,000 seeds/oz.

5726 Pink Candle Wheat Celosia *C. cristata spicata* An improved wheat celosia that is more adaptable to growing in northern climes than other kinds. Like melons, it requires a little extra attention for success. Start indoors early, transplant before flowering without permitting shock, and use row covers outdoors. Its shining rose-pink plumes on long strong stems are worth the extra fuss. They hold up well as cutflowers and dry beautifully. The 3' clumps are lovely as a vertical pink accent for late season displays. Colors, which lighten during summer's heat, intensify in the cooler temperatures of fall. See also **#5526-30.** A=.1g, ~85 seeds, *Not available in larger sizes.* 24,500 seeds/oz.

5732 Forest Fire Cockscomb *C. c. plumosa* Plume-type celosia or Feather Amaranth shows bright scarlet flowers, with strikingly beautiful bronze-red foliage. 30-36". A=.2g, ~300 seeds, B=7g, C=28g. 43,500 seeds/oz.

5736 Chinese Lantern *Physalis alkekengi. Not available in 1999.*

GLOBE AMARANTH *Gomphrena globosa*

Prices for everlastings #5705-5982: A=70¢, B=$2.00, C=$5.00.

Easily grown in any soil, likes hot sun. One of the most prolific. Tolerates some frost. Beautiful clover-like 1" flowers on 2' stems. Also enjoyable as bedding plant. Sow indoors in warm spot, 2 months before setting out. Do not overwater.

5742 Orange Stood out in our 1994 trials for its large reddish-orange blossoms with a hint of yellow undertone, well suited for fall arrangements. Growers will prize its long strong stems and vivid colors. 18". A=.1g, ~25 seeds, B=.4g, C=1.2g. 7,300 seeds/oz.

5746 Purple Bright purple, almost fuchsia. A=.1g, ~25 seeds, B=.4g, C=1.2g. 12,000 seeds/oz.

5750 Qis Red *Crop failure. Hope to have back in 2000.*

5754 Mix Shades of purple, rose, lavender & white. A=.2g, ~50 seeds, B=.8g, C=3.2g. 12,000 seeds/oz.

5762 Honesty *Lunaria annua* Also known as Silver Dollar, Moneyplant, and Moonwort. Winter-hardy biennial has fragrant lavender flowers, but is usually grown for its large coin-shaped silver seed pods which are lovely in winter bouquets. Sow indoors in cool spot before setting out to a sunny location or direct sow spring or fall. 3' A=1g, ~50 seeds, B=14g, C=42g. 1,500 seeds/oz.

5770 Immortelle Mix *Xeranthemum annuum* Papery daisy-like flowers 1½" across in a wide range of colors; also a nice cutflower, grows to 3'. Grown easily from seed, or can be started early indoors. Germinate at 70-75° in 2-3 weeks. A=.25g, ~190 seeds, B=1.5g, C=6g. 22,500 seeds/oz.

LOVE-IN-A-MIST *Nigella* spp.

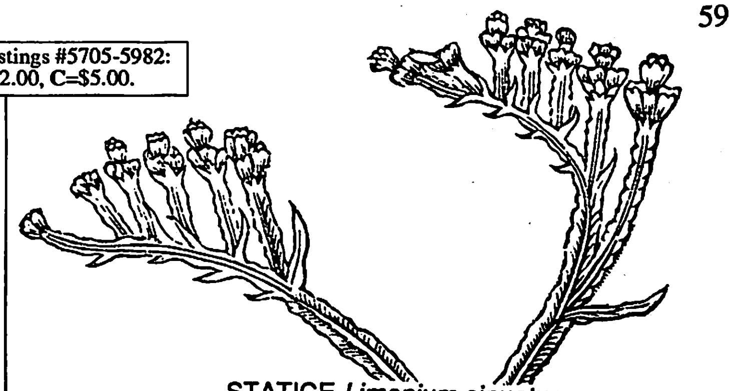
5782 Persian Jewels Mix *N. damascena* Profuse blooms in pink, blue and white shades surrounded by a cloud of greenery make lovely bouquets. Seed heads are used dried and are especially nice with a little bit of the flower attached. Direct seed as soon as ground can be worked, or sow indoors in a cool spot 2 months prior to setting out. Plant in full sun. 18" A=.4g, ~160 seeds, B=2g, C=14g. 11,000 seeds/oz.

5786 Transformer *N. orientalis* Yellow flowers followed by curiously shaped seed pods that may be "transformed" into seven-pointed stars by splitting the pods open at the seam and folding them back in a form of floral origami! Unique and easy to grow. 2' tall. A=.5g, ~200 seeds, B=2g, C=8g. 11,400 seeds/oz.

5790 Exotic *N. hispanica* Nikos has a single velvetleaf plant growing in her field from which she harvests starry seed pods every year for Christmas ornaments. The velvetleaf is a farmer's bane, a pernicious weed, but oh, those pods! Exotic's golden brown pods are similar to velvetleaf's with a more spidery appearance that will add interest and volume to any dried arrangment. Unlike velvetleaf, this annual won't be a nuisance in the field. Doubles as a serviceable cutflower blooming with an arresting shade of deep blue—almost purple—with open form and striking maroon stamens. Atop 16" stems, the blossoms hold longer in a bouquet than other Love-in-a-Mists. Likes full sun or light shade. A=.1g, ~90 seeds, B=.4g, C=2g. 25,500 seeds/oz.

5804 Tricolor Salvia *S. viridis* Also known as painted sage. This prolific little beauty is splendid both as a dried flower or as a filler in fresh arrangements. Although its leaves are entirely green, it gains its name from its white and blue flowers set off by large pink-to-purple bracts. Easily air-dried, it will remain very colorful, flowering until frost if old blooms are removed. 18" stems. Germinates in 21 days at 60°F. Needs well-drained soil. A=.5g, ~340 seeds, B=2g, C=6g. 19,000 seeds/oz.

5810 Ping Pong Starflower *Scabiosa stellata* Small white flowers dry to ball-shaped many-faceted seed heads. Each facet has a delicate maroon star embossed on its center. 2' annual. A=.4g, ~10 seeds, B=2g, C=6g. 800 seeds/oz.



STATICE *Limonium sinuatum*

Faithful standby in everlasting bouquets; also good in fresh arrangements. Annual reaches 2-2½' on stiff winged bright green stems. Flowers may be gathered for drying many times throughout summer. Sow in warm spot indoors 2 mos. prior to setting out. Grow in full sun. Seed is rubbed for easier germination. 8,400 seeds/oz.

5816 Apricot A=.2g, ~60 seeds, B=1g, C=4g.

5820 Atrocaerula Blue Medium-deep violet-blue. A=.2g, ~60 seeds, B=1g, C=4g.

5824 Lavender A=.2g, ~60 seeds, B=1g, C=4g.

5828 Rose Beauty Red. A=.2g, ~60 seeds, B=1g, C=4g.

5832 Purple Monarch Deep purple. A=.2g, ~60 seeds, B=1g, C=4g.

5836 White A=.2g, ~60 seeds, B=1g, C=4g.

5842 Mixed Colors A=.4g, ~120 seeds, B=2g, C=6g.

5846 German Statice *Goniolimon tataricum* Large silvery-white flower heads for drying. Grow indoors in a cool place 6 to 8 weeks, set out in early spring, or direct seed early spring or late fall. Perennial. Clean seed. 20". A=.05g, ~50 seeds, B=.2g, C=1g. 31,000 seeds/oz.

5852 Russian Statice *Psyllostachys suworowii* Long gracefully curved branched spikes with bright rosy-pink flowers. Good color retention. A poor germinator. Annual reaches 18". Originally from Turkestan. A=.2g, ~1,280 seeds, B=.6g, C=1.8g. 175,000 seeds/oz.

5860 Gabriele Rose Beauty Strawflower *Helichrysum cassianum* Each stem produces a cluster of small daisy-like rose pink flowers with yellow centers. The doubled petals create a full "starry" effect. The 16" plants are easy to grow, like full sun, and are already nearly dry when fully developed. Their texture and ability to hold color well enable them to fill a significant area in arrangements. A=.1g, ~27 seeds, B=.5g, C=2g. 8,000/oz.

STRAWFLOWER *H. bracteatum*

The freeblooming strawflower is good for border color as well as for drying. Monstrosum varieties grow 30-40" tall, have 2-2½" fully double flowers. Sow indoors in a warm spot 2 mos. before setting out. Do not cover seeds. Grow in full sun. Gather blossoms before fully opened. Like warm weather but will bloom into fall.

5864 Monstrosum Fire Ball Bright red. A=.2g, ~260 seeds, B=1g, C=5g. 36,000 seeds/oz.

5868 Monstrosum Silvery Rose A very subtle bicolor with pink center petals surrounded by silvery white. Borne on well-branched plants that start producing 3½-4 months after indoor seeding. A=.2g, ~260 seeds, B=1g, C=10g. 36,000 seeds/oz.

5872 Monstrosum Mix Hot pink, light pink, white, gold and deep rose. A=.33g, ~400 seeds, B=7g, C=28g. 45,000 seeds/oz.

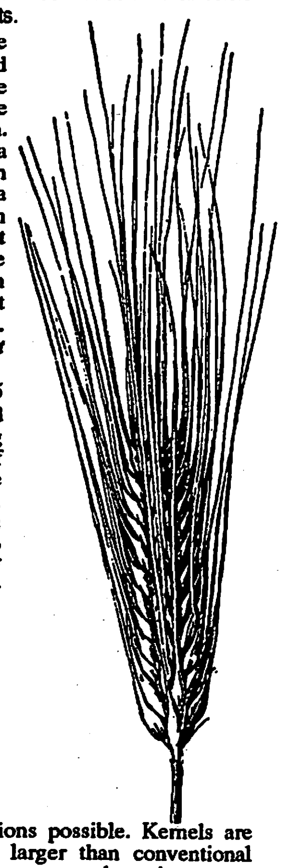
5876 Bikini Mix These bikinis bear bright pink, red, white, yellow and gold double flowers on dwarf 14-18" plants in just 12 weeks. Several commercial arrangers we know prefer them to the taller strawflowers. A=.1g, ~130 seeds, B=.8g, C=3.2g. 36,000 seeds/oz.

5884 Sweet Annie *Artemisia annua* Also known as sweet wormwood. For years our booth at Common Ground Fair was adjacent to Delightful Odds and Herbs. They always had Sweet Annie for sale. We've come to associate its pungent fragrance with the fair. Increasing numbers of fairgoers have asked for its seed. Annie grows up to 5', with light green leaves valued for everlasting wreaths. It will reseed itself vigorously. Seed must be frozen for 2 days, then germinated in light. A=.2g, ~50 seeds, B=.6g, C=2.4g. 7,000 seeds/oz.

5890 Grandiflora White Winged Everlasting *Ammobium alatum* To some people its branches look winged...to me they just look sinuous. No argument, though, that its white petals with yellow centers look mighty good in arrangements. Sow indoors 8 to 10 weeks before setting outdoors in sunny location. 24". A=.5g, ~1,200 seeds, B=2g, C=6g. 67,500 seeds/oz.

GRAINS & GRASSES

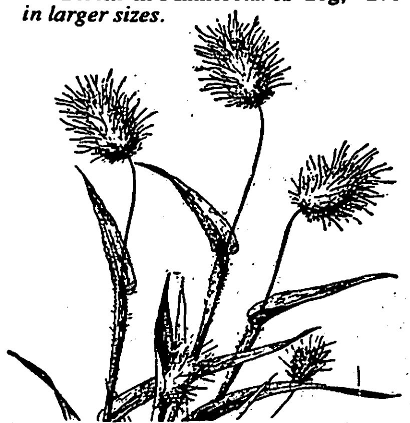
Grasses are a special tool in the flower arranger's kit. Choose these decorative annuals for their differing forms as well as for their colors. The intricate designs of their heads make great accents.



5910 Sheba Barley *Hordeum vulgare* We are pleased to have seed again. Sheba's grand display will interest any gardener with even the barest of aesthetic ambitions, including those totally uninterested in harvesting the grain. (Incidentally, have you ever baked Tassajara barley bread with roasted barley flour? On second thought, let's not ignore the grain!) Sheba is a 6-row naked-seeded spring barley which originated in Egypt. Its strong 4' plants don't lodge; look magnificent in late summer. Once you try it you'll never be content with an all-vegetable garden again. Seed grown without herbicides, pesticides or chemical fertilizers. BACK! A=28g, ~885 seeds, B=84g. *Not available in size C, order size B.*

5930 Red Broom Corn *Sorghum vulgare* (105 days) Not a true corn, broom corn looks and grows like corn but develops no ears, producing instead, a tall spray of seed heads at the top of the plant in lieu of a tassel. These 2-3' sprays are laden with shiny red 1/8" seeds which birds love. Incorporate seeds into edible bird feeder wreaths or leave them intact to add a bit of variety to traditional fall decorations, or comb them out of the dry stalks and tie the seedless heads together to make straw brooms. Broom corn is the true source of our natural straw broom. Stalks will grow up to 10' in an optimal season, though most years they will be 7-9'. A=4g, ~190 seeds, B=12g, C=36g. 1,600 seeds/oz.

5940 Calico Popcorn *Zea mays* (105 days) An heirloom dual-purpose corn with 5-8" ears that look like smaller versions of Indian corn. The shiny bright ears come in an array of colors, with red, yellow and calico most common, but brown, purple, blue, white and other combinations possible. Kernels are smaller than those of most Indian corns, but larger than conventional popcorns. Calico is both decorative and edible so you can hang it on your door in fall and pop the very same batch on Thanksgiving. Seed grown by the Biseks in Minnesota. A=28g, ~270 seeds. 4,000 seeds/lb. *Not available in larger sizes.*



5950 Hare's Tail *Lagurus ovatus* Grown for its soft grey-to-white dense wooly conical heads which feel like rabbit's fur and will tickle your fancy. Easy to air-dry; make a great addition to everlasting arrangements. 1' stems. A=.1g, ~180 seeds, B=.5g, C=7g. 51,000 seeds/oz.

5958 Foxtail Millet *Setaria macrocheata* Its graceful 3-6" golden seed heads bobbing on an August breeze attract attention even before harvest. After harvest, Foxtail Millet makes a striking counterpoint in floral displays. Customers have been asking for this specific strain because its heads are softer and look less seedy than other types. Plant in June, harvest mid to late August. A=1g, ~460 seeds, B=4g, C=28g. 13,000 seeds/oz.

5964 Quaking Grass *Briza maxima* Also known as Totter Grass. An old favorite for floral designers. The large 2 1/2" rattle-like seed heads hang from strong 14-16" stems. A=1g, ~190 seeds, B=5g, C=15g. 5,500 seeds/oz.

5972 Black Sorghum *Sorghum nigrum* 6-8' plants topped with robust oval black inflorescences. Shorter and earlier than other sorghum varieties which often reach 12'. Sorghum, originally from Africa, is cultured in the South for the sweet syrup of its stalks. In the ornamental trade it is used as the focal point for large arrangements. Harvesting the heads at the right stage is an exact science; gotten too early they are not dark enough, too late they may discolor or shatter. A=1g, ~60 seeds, B=4g, C=12g. 1700 seeds/oz.

5982 Spelt *Triticum spelta* Spelt has been cultivated since ancient times. A hardy variety of wheat which is very tough, highly adaptable to our rigorous climate and grows well even in poor soils, Spelt sports a rich golden shaft with somewhat 4-sided 3-5" spikes. Although its spikes are slender and loose, the heads are tough and won't shatter. Spelt is good for braiding because it has a long shaft before the first joint. Heads show quite a color range from green to green-gold to white. After we run out of a small quantity of commercial seed, we will be shipping organically grown seed from Maine. A=1g, ~8 seeds, B=4g, C=28g. 225 sds/oz.

Prices for everlastings #5705-5982 & perennials #6008-6336:
A=70¢, B=$2.00, C=$5.00.

PERENNIAL FLOWERS

Seeds per packet for flowers are approximate. They are intended as guides, not guarantees, because we pack by weight, not by count. Available in three sizes except where noted. **Packet weights are listed with each flower.**

Flowers are arranged here by common name. See page 48 for a chart of common uses and an index of botanical names.

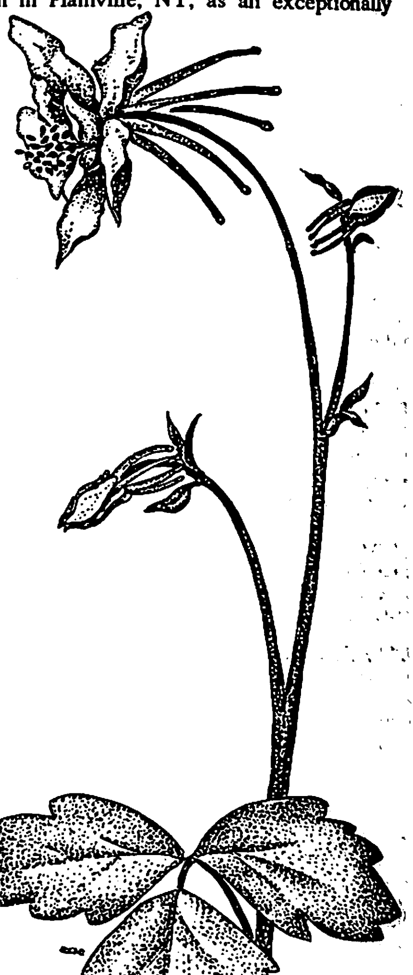
For other perennials, see #4512, 4734, 4742, 4776, 4782, 4786, 4806, 4826, 4836, 4900, 4964, 4984, 4986, 4990, 5705, 5716, 5846. Also see our Trees catalog for perennial plant crowns.

6008 Cerise Queen Achillea *A. millefolium* Also known as Pink Yarrow. Easy to grow and tolerant of drought, heat and poor soil. Beautiful cherry-red flower heads 2-4" across on 18" stems with lacy foliage. A good border plant. Zones 3-10. A=.1g, ~700 seeds, B=.5g, C=3g. 200,000 seeds/oz.

6020 Single Alba Baby's Breath *Gypsophila paniculata* Lovely as a border plant in masses, bearing many tiny single white flowers. If cut before fully opened, useful as an everlasting. Seeds may be sown direct, do not cover. Grows to 3'. Zones 4-8. A=.7g, ~940 seeds, B=7g, C=21g. 36,000 seeds/oz.

6028 Blue Clips Bellflower *Campanula carpatica* Masses of light cobalt blue bellflowers dance 8" high above a mound of foliage. A very hardy perennial that is easy to grow, Blue Clips will bloom in sun or partial shade from June to October. Zones 4-10. A=.05g, ~600 seeds. 340,000 seeds/oz. *Not available in larger sizes.*

6034 Butterfly Weed *Asclepias tuberosa* Also called Pleurisy Root. Native to North America and widely adaptable, this bright sun-loving perennial provides a bold splash of orange from June until frost. Vigorous mounded 2x2' plants bear broad 5" heads of waxy flowers attractive to butterflies. Both the flowers and pointed seedpods are useful for cut arrangements. Native Americans used it to combat lung and throat troubles and to soothe wounds and sores. Germinates in 3 weeks at 70°. Choose a permanent site with well-drained fertile sandy soil because its tuberous roots do not like to be disturbed. Direct sow in spring or fall. Named by the Xeriscape Demonstration Garden in Plainville, NY, as an exceptionally drought-tolerant performer. Zones 4-9. A=.2g, ~40 seeds, B=.6g, C=3g. 5700 seeds/oz.



COLUMBINE *Aquilegia* spp.

To many, columbines are an essential part of the cottage garden or border. Their spurred flowers in mixed colors lure the fairies into the garden. Likes moist well-drained soil, sun or partial shade. Zones 3-10.

6042 Mrs. Scott Eliot Mixed *A. caerulea* Free-blooming white, red, lavender and pink flowers rising to 30" on strong stems. Pre-chill seed 3-4 weeks. Will bloom 1st season if seeds are sown indoors in early spring. Do not cover. Takes 3-4 weeks to germinate. Flowers May and June, attracts hummingbirds. A=.6g, ~80 seeds, B=1.8g, C=5.4g. 3,800 seeds/oz.

6048 European *A. vulgaris* A much better landscape plant than Mrs. Eliot or McKana Giants because its leaves will remain green through the whole season. Blossoms are mostly pink, with a few purple and white shades. 2 1/2'. A=.3g, ~240 seeds, B=1.2g, C=6g. 22,500 seeds/oz.

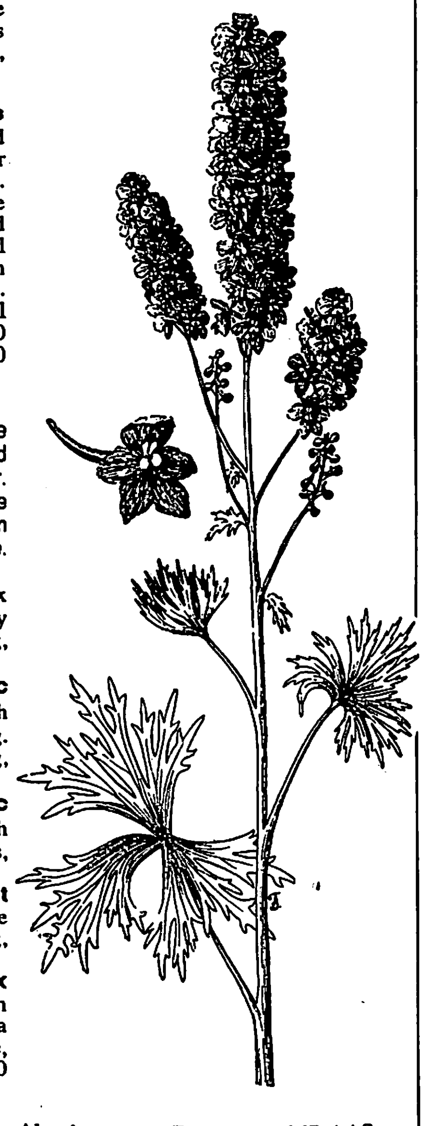
6054 Goldsturm Coneflower *Rudbeckia fulgida* 1999 Perennial Plant of the year offers a profusion of shining golden yellow flowers with dark central cones in August and September. Hardy perennial transplants well and has larger flowers (up to 5" across) than its wild counterpart (Black-Eyed Susan). The 2' plants have long, strong stems ideal for cutting. Zones 3-10. A=.1g, ~90 seeds, B=.4g, C=1.2g. 25,000 seeds/oz.

CORAL BELLS *Huechera sanguinea*

Named for Johann Heinrich von Heucher, a German botanist. Their dwarf, compact habit make coral bells excellent for low borders and rockeries. They like good soil and partial shade, but will tolerate full sun. Zones 4-10. 560,000 seeds/oz.

6062 Bressingham Hybrids Palest pink to deepest crimson sprays of graceful bells rise from 18" hardy plants of heart-shaped foliage. Start indoors in cool place 8-10 weeks before setting out. Need light to germinate. A=.02g, ~400 seeds, B=.1g, C=.3g.

6064 Purple Palace This striking perennial border plant stood out in our tour of Zone 4 Perennials' gardens in Sidney. Its showy 12" ivy-shaped mahogany-red leaves (discard the few plants that make green foliage) make it an attractive ground cover. Its small white bell-shaped flowers are insignificant. Divide and sidedress every three years. A=.02g, B=.06g, C=.18g.



6068 Early Sunrise Coreopsis *C. grandiflora* 1989 AAS was based on its ability to bloom weeks earlier than other Coreopsis varieties. Dense well-branched 18" plants are loaded with 2" semi-double vivid yellow blooms. Start indoors in cool place 6-8 weeks before setting out in sunny spot. Do not cover seed. Leave dead foliage on plant until spring. Zones 3-10. A=.1g, ~40 seeds, B=.3g, C=.9g. 12,000 seeds/oz.

DELPHINIUM spp.

Stately dense racemes make delphinium excellent as a background plant, in the border, and as a cutflower. Likes sun, moist soil, can tolerate some shade. Heavy feeder; sidedress in spring with well-composted manure. Zones 3-7. All types 13,000 seeds/oz.

6080 Astolat Pacific Giant *D.* x *elatum* Pastels of lilac, raspberry and rose with dark bees. 6'. A=.2g, ~90 seeds, B=.6g, C=1.8g.

6084 Black Knight Pacific Giant Intense dark purple with black bees. Stately and breathtaking. 6'. A=.2g, ~85 seeds, B=.6g, C=1.8g

6088 Summer Skies Pacific Giant Light heavenly blue with white bees. 6'. A=.25g, ~110 seeds, B=1g, C=3g.

6094 King Arthur Pacific Giant Velvety royal purple with white bees. 6'. A=.25g, ~110 seeds, B=1g, C=3g.

6098 Connecticut Yankee Mix *D.* x *cultorum* Dwarfed version grows only 3'; good where wind is a problem. 1965 AAS in blue, purple, lavender and white. A=.25g, ~110 seeds, B=1g, C=3g.

6110 Foxy Digitalis *D. purpurea* Also known as Foxglove. 1967 AAS. No wonder customers clamored for us to get Foxy. A breeding breakthrough allows this biennial to bloom the first season. Foxy starts blooming when only 18" high—just five months from seed—and continues with up to nine spikes apiece as it grows to a mature 3'. Germinates at 70-75° in about one week and grows easily in sun or part shade. Foxy's thimble-shaped flowers range from cream yellow to pinks, with many attractive spotted markings. Entire plant is poisonous. Zones 4-10. A=.1g, ~1,000 seeds, B=.4g, C=2.4g. 272,500 seeds/oz.

6120 Blue Flax *Linum perenne* subsp. Lewisii Also known as Prairie Flax. Single light-blue flowers with finely cut foliage for borders or rock gardens. New flowers open every morning all summer, fade in afternoon heat. Likes full sun. 9-12". Start indoors in a cool place 6-8 weeks before setting out or direct seed in cool soil in spring or fall. Zones 4-9. A=1g, ~750 seeds, B=7g, C=28g. 21,000 seeds/oz.

6130 Grandiflora Mix Gaillardia *G. grandiflora* Also known as Blanketflower. Easily grown perennial sports showy fringed daisy-like flowers of maroon red edged in gold which will bloom from June to frost. Strong 2 1/2' stems are good for cutting. Will blend right into fall arrangements. Prefers dry, sunny locations to moist fertile ones. Will bloom the first year if sown early. Zones 3-9. A=.25g, ~85 seeds, B=1g, C=4g. 9,500 seeds/oz.

Prices for perennials #6008-6336:
A=70¢, B=$2.00, C=$5.00.

HOLLYHOCK *Alcea rosea*

An old-time favorite for background color. Biennial, will reseed in good year. Needs staking. Cut flower stalk to induce rebloom. Likes full sun, lots of room, and moist soil. Seed may require alternate freezing and thawing to break dormancy. Germinate in 10 days at 70°F. Start indoors in a warm place 2 mos. prior to planting. Zones 3-8. 3,240 seeds/oz.

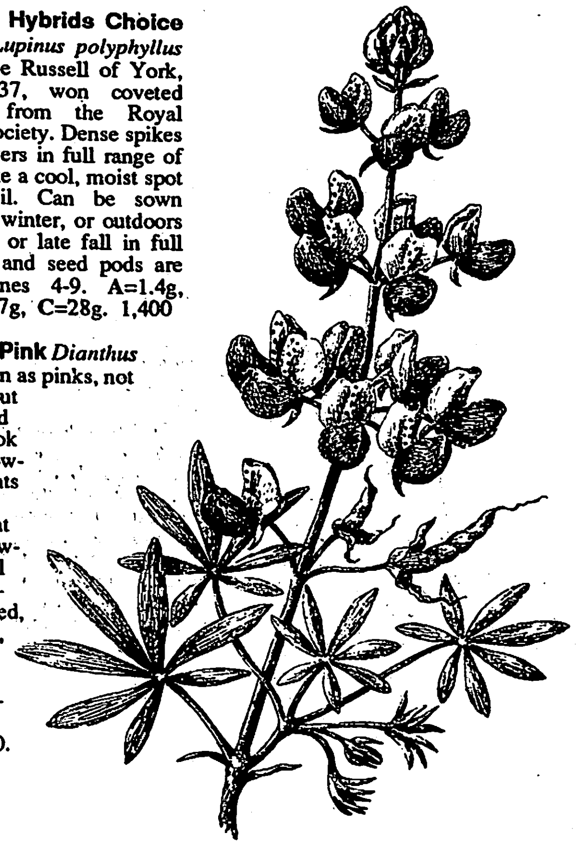
6138 Aunt Rose's A rose is a rose is a rose? Passers-by often mistake this stunning deep crimson very double hollyhock for a rose. This storehouse of beauty and memories was saved over her lifetime by Rose Ma[illegible]cin of New Jersey, and rescued upon her death by her nephew Frank Fekete of Belgrade, ME. Each plant rises a stately 7', producing about a dozen terminal shoots climaxing in a profusion of blooms in two flushes, throughout July and well into August. Likes high fertility, plenty of moisture and full sun. A prime example of the value of seed saving. Seed grown in Maine. NEW! A=.25g, ~25 seeds. *Not available in larger sizes.*

6140 Chater's Double Mix Double flowered in shades of red, pink, yellow and white. 4-5'. A=1g, ~115 seeds, B=5g, C=15g.

6146 Indian Spring Single Mix Customers asked us to find an old-fashioned single. 7' beauty favored by hummingbirds in shades of red, yellow, white and rose. 1939 AAS. A=.25g, ~25 seeds, B=1g, C=3g.

6152 Black Hollyhock *A. r.* var. *nigra* Shimmering burgundy-black single flowers characterize this heirloom hollyhock which blooms the second year. Biennial lasts 3-4 years in favorable conditions. Surface sow inside in April. Overly rich potting mixes will encourage damping off. Seed organically grown in the western mountains of Maine. This may be the same black hollyhock grown by Thomas Jefferson at Monticello. A=.25g ~32 seeds, B=1g, C=4g. 3,800 seeds/oz.

6170 Helen Mount Johnny Jump Up *Viola tricolor* Also known as Heartsease Pansy. This 4-6" favorite bears tricolor blooms in violet, lavender, and canary yellow. Small abundant flowers like partial shade. Can be direct seeded early spring for flowers late in season or sown in fall for earlier blooms the following year. Some call it invasive, others enjoy its cheerful spreading habit. Flowers make edible decorations with a faint wintergreen taste. Zones 3-9. A=.5g, ~450 seeds, B=1.5g, C=4.5g. 25,500 seeds/oz.



6186 Russell Hybrids Choice Mix Lupine *Lupinus polyphyllus* Bred by George Russell of York, introduced 1937, won coveted Gold Medal from the Royal Horticultural Society. Dense spikes with large flowers in full range of colors. They like a cool, moist spot and sandy soil. Can be sown indoors in late winter, or outdoors in early spring or late fall in full sun. 3'. Seeds and seed pods are poisonous. Zones 4-9. A=1.4g, ~75 seeds, B=7g, C=28g. 1,400 seeds/oz.

6196 Maiden Pink *Dianthus deltoides* Known as pinks, not for their color but for their serrated petals which look pinked, these low-growing 6" plants thrive in shade. Dense green mat topped with flowers blooming all summer in a variety of bright red, purple magenta, pink, and white with a red ring. Likes sun, well-drained to dry soil. Zones 2-10. A=.05g, ~275 seeds, B=.2g, C=1g. 157,000 seeds/oz.

6204 Maltese Cross *Lychnis chalcedonica* Desirable 3' border plant, also known as Red Campion, excellent for cutflowers. Produces brilliant scarlet florets in a five-part cross, attracts hummingbirds. Makes a hot color combination with coneflowers and Gaillardia. Thomas Jefferson grew these at Monticello in 1807. Start indoors in early spring or midsummer for blooms next year. Do not cover seeds. Like moist soil and full sun. Zones 3-10. A=.4g, ~55 seed, B=2g, C=6g. 4,000 seeds/oz.

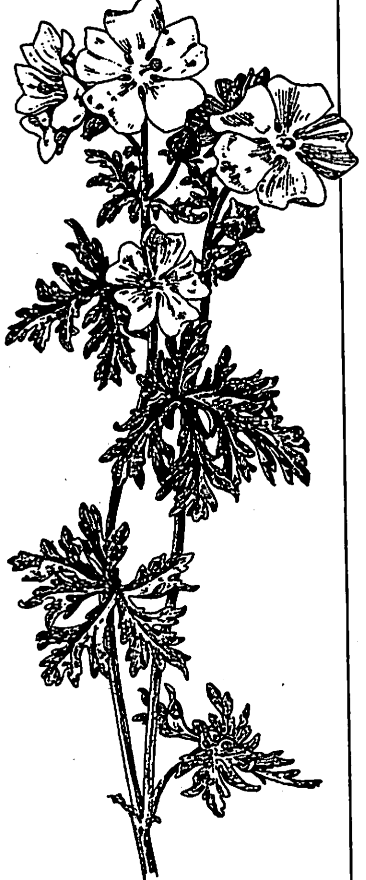
Prices for perennials #6008-6336:
A=70¢, B=$2.00, C=$5.00.

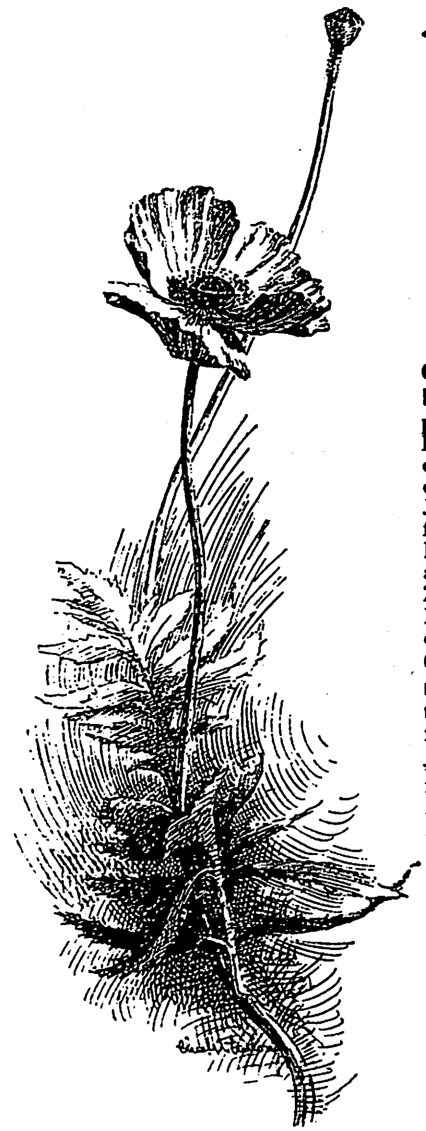
6214 Mountain Bluet *Centaurea montana* Also known as perennial Bachelor's Button. Native to the mountainous regions of central Europe. Airy 2½" flowers of violet-blue with purple centers are borne on bushy 2' plants. Easy to grow, they like a well-drained sunny location. Blooms July through frost. Zones 3-8. A=.25g, ~20 seeds, B=1g, C=4g. 2,150 seeds/oz.

6224 Musk Mallow *Malva moschata* Also known as Musk Rose. The perennial counterpart to annual lavatera, hardy to zone 4a, possibly zone 3. 1-3' plants produce abundant 2" rose or white flowers in mid-late summer on dark green deeply toothed foliage. Soft leaves exude a musky fragrance when rubbed or brushed. A classic cottage garden flower which tolerates dry soil and thrives in sun or partial shade. Was also valued as an herb for soothing inflammations. A=.2g, ~100 seeds, B=.6g, C=2.4g. 14,000 seeds/oz.

6234 New Hybrids Mix Phlox *P. paniculata* F-1 hybrid. Perennial phlox blooms from June till frost. Excellent for borders and cutflowers. Mix of whites, pinks, reds and lilacs. Freeze seeds 10 days before sowing indoors, or direct seed in cold soil. Slow germinator, takes 3-4 weeks. Likes full sun. 3'. Zones 3-9. A=.1g, ~8 seeds, B=.3g, C=.9g. 2,500 seeds/oz.

6244 Gartford Giants Mix Poppy *Papaver nudicaule* Known as Iceland Poppy. Delicate white, yellow, gold, apricot, orange blossoms from May to frost. Direct seed in spring in a sunny spot. 1'. A=.4g, ~2,500 seeds, B=4g, C=12g. Zones 2-8. 174,000 seeds/oz.





6254 Dwarf Allegro Oriental Poppy *P. orientale* Long-lived perennial grows 16". Fern-like leaves, showy buds, opening to dazzling scarlet flowers with contrasting black eyes. Sow in June, transplant in October for flowers the following summer. Plant alongside border perennials and ornamental grasses. Zones 2-8. A=.05g, ~250 seeds, B=.2g, C=.6g. 145,000 seeds/oz.

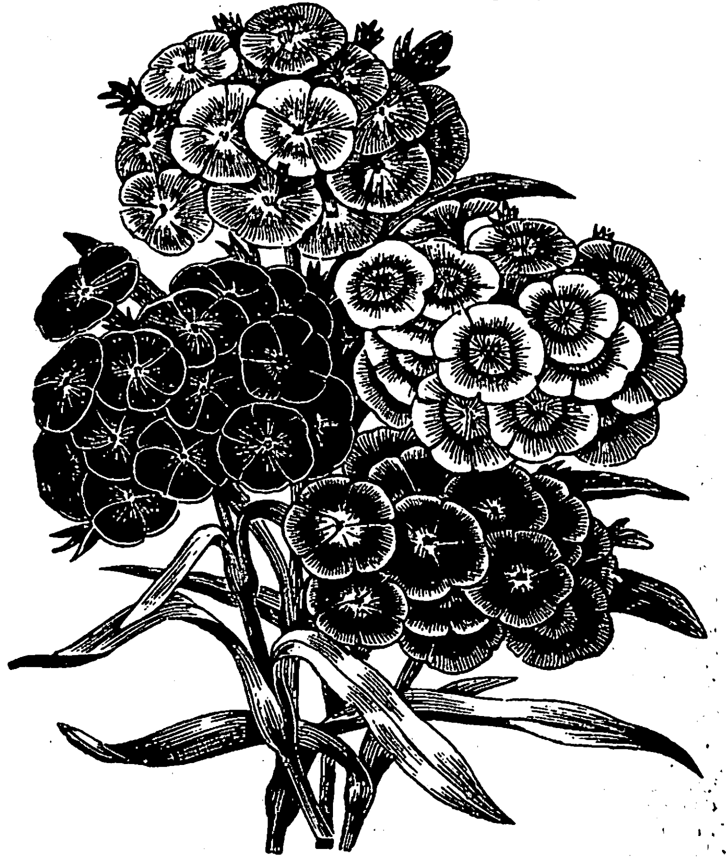
6262 Potsdam Mix Primrose *Primula vulgaris* These tidy harbingers of spring burst forth with a shot of bright color just when it's most needed, in late April or early May. Resembles small bouquets in pink, blue, yellow and red with yellow centers. Most attractive massed in a low border planting or under a canopy of trees. They like partial shade and prefer a moist well-drained soil high in organic content. Some seasons a second full blooming will poke through the carpet of autumn leaves. Zones 3-8. *Seed in short supply; order early.* A=.04g, ~35 seeds. *Not available in larger sizes*. 900 seeds/gram.

6272 Alaska Strain Shasta Daisy *Chrysanthemum x superbum* 3'. Clean white flowers with bright yellow centers make good cutflowers and border plants for sunny locations. Looks good with Gaillardia and Coreopsis. One of the easiest perennials to grow; will usually bloom first year if started indoors in spring and transplanted when soil warms. Zones 4-10. A=.5g, ~475 seeds, B=4g, C=16g. 27,000 seeds/oz.

6282 Red & Gold Hybrids Sneezeweed *Helenium autumnale* Also known as Sunny Bride. A rich chromatic scale of bronze, brown, crimson and yellow shades for an end-of-summer display. Single flowers resemble coreopsis but have a large center "button" like coneflower atop 4' plants. Combine with asters and phlox for great late-season color. Not fussy, easy to grow, excellent for cutting. At its prime when most perennials have finished blooming. Zones 3-10. A=.1g, ~500 seeds, B=.3g, C=.9g. 142,000 seeds/oz.

6296 Perennial Sweet Pea *Lathyrus latifolius* The traditional English cottage sweet pea, grown by Jefferson in 1771, thrives in cool climates, loves sun, climbs 6' and is useful as a screen. Comes in shades of rose, white and pink in big clusters. Good cutflowers. Soak seeds up to 24 hours before sowing outdoors in early spring. Can take 3-4 weeks to germinate. Zones 3-10. A=1g, ~20 seeds, B=3g, C=12g, 600 seeds/oz.

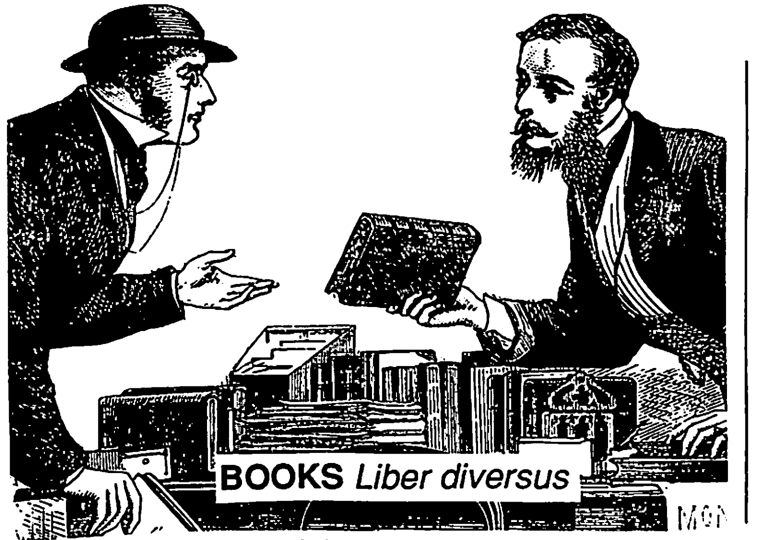
6306 Double Choice Mix Sweet William *Dianthus barbatus* A fragrant biennial in red, pink, white, lavender or mixed colors. Germinates in 7-14 days at 70°. May be started 2 mos. before setting outdoors, or sown where it will grow in late summer or fall. Requires full sun and good drainage, likes lime. 18". Zones 4-10. A=.5g, ~475 seeds, B=7g, C=28g. 26,600 seeds/oz.



6316 Creeping Thyme *Thymus serpyllum* Also known as Mother-of-Thyme or Brotherwort (not to be confused with Motherwort!). Creeping sweet-scented ground cover with purple flowers good in rock gardens, between stepping stones, or on dry slopes. Likes good drainage, full sun and alkaline soil. Plants grow slowly from seed, may be started indoors 2 mos. before planting, or outside in early spring or fall where they will grow. Sow thickly, do not cover seeds. 2". Zones 3-10. A=.1g, ~800 seeds, B=1g, C=3g. 224,500 seeds/oz.

6326 Sightseeing Mix Veronica *V. spicata* Also known as Speedwell. A wonderful mix of pink, white and blue-violet flowers—glorious when they're all blooming together. Growing uniformly to 2-2½' with erect, pointed spikes, makes a great border, also a superb cutflower. Will bloom the first year if started early indoors. Zones 3-8. A=.05g, ~400 seeds, B=.15g. *Not available in size C, order size B*. 225,000 seeds/oz.

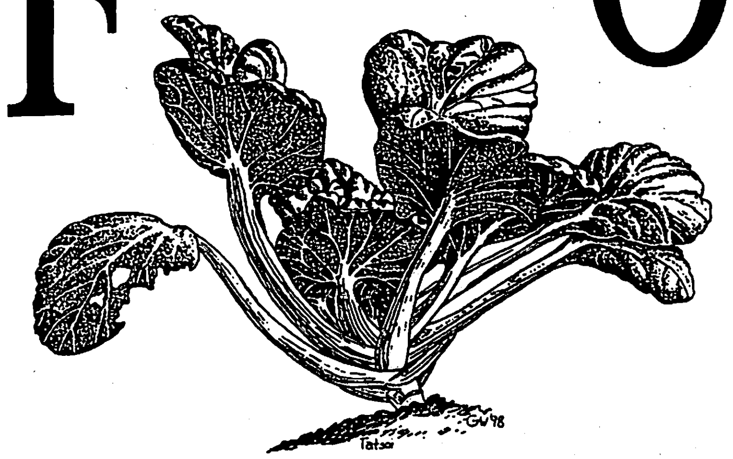
6336 Wildflower Mix for the Northeast. A blend of 20 perennial and self-sowing annual species native to or naturalized in northeast US and Canada. Includes Dame's Rocket, Black-Eyed Susan, Shirley Poppy, Blazing Star and Bachelor's Button. Start in cool place indoors two months before setting out, or broadcast in spring or fall in a seedbed in a sunny spot. A=1.4g, ~3,000 seeds, B=7g, C=28g, D=1lb, $30.00, not listed on the grid form, see p. 6 for bulk ordering instructions. 60,000 seeds/oz.



FEDCO

6500-6501 T-Shirts Our new design for 1999 features Gabriel Willow's tatsoi, dark green with yellow-green stalks on a sage green background. Printed by Liberty Graphics of Liberty, ME. 100% cotton short- and long-sleeved beefy T's. Sizes are medium (38-40), large (42-44) and extra-large (46-48). $13.00 short-sleeved; $17.00 long-sleeved.

6504 From Asparagus to Zucchini: A Guide to Farm-Fresh Seasonal Produce Published by the Madison Area Community Supported Agriculture Coalition, 195 pages, 8½x11, spiralbound. A cookbook redolent with the flavor of the Community Supported Agricultural movement which spawned it. Designed to introduce their CSAs to the Madison community and beyond, it emphasizes locally produced food and seasonally appropriate menus. 46 profiles of vegetables and herbs include history (the startling news that kohlrabi appeared suddenly and without explanation in Europe in the middle of the 16th century), cooking and storage tips, and simple pleasing recipes from local farms and interesting cookbooks. Seasonal recipes use combinations of vegetables one might receive from one's CSA at each time of the year. A chapter on home preservation encourages folks to eat locally beyond the growing season. Profiles of 17 member farms, plus 11 supportive restaurants and stores and a list of 10 Dane County farmers' markets bring the Madison area that much closer. The publishers have ensured that, unlike the kohlrabi in Europe, CSA will not have appeared suddenly and without explanation in Wisconsin in the late 20th century! NEW! $18.50



T-shirt Tatsoi design by Gabriel Willow

6508 A Biodynamic Farm by Hugh Lovel, 215 pages, 6x9, softcover. Intrigued by biodynamics, but find some of its principles esoteric or downright inaccessible? Always wanted to know what's in those mysterious BD preparations and how and why to use them? To date, Lovel's treatment is the most straightforward available. He is even critical of some initiates who wanted to keep the details secret. He gets off to a good start with a serious 34-page glossary! Biodynamics is much more than another system of agriculture and Lovel's book is more than just another look at agriculture. It examines the meaning of words, how language can mislead and beguile, and what social and political calamities can result. All of us are familiar with the force of gravity as an explanation for how the apple falls from the tree. But can any of us explain how the apple got up there in the first place? Could there be another force we have forgotten? $17.00

6510 Biopiracy: the Plunder of Nature and Knowledge by Vandana Shiva, 148 pages, 5½x8½, softcover. The biggies who control the seed trade invoke the necessity of protecting and strengthening intellectual property rights like a refrain. But noted Indian physicist Vandana Shiva has a contrary view, likening the appropriation of indigenous knowledge and patenting of life forms by transnational corporations to the second coming of Columbus. As the Papal Donation of 1493 granted all the fruits of exploration to the monarchs of Spain, so does the General Agreement on Tariffs and Trade (GATT) grant ownership of all undiscovered life-forms to Western corporations. Having colonized, eroded and polluted externalities such as land, forests, rivers and oceans the exploiters have now invaded the internal spaces of the bodies of women, plants and animals. In a pithy compelling passionate essay, Shiva asks us to resist this new wave of exploitation which is being carried on under the misnomer of "free trade." See the discussion of Terminator Technology on page 5 for a related issue. $14.00

6512 Botany for Gardeners: an Introduction and Guide by Brian Capon, 220 pages, 6x9, softcover. If they had given me this book in high school I would have liked and understood biology. Capon demystifies each technical term he introduces by recounting its often humble derivations. It was news to me that the word chromosomes means "colored bodies" because they take stain so readily. Less intimidated by chromosomes, I now understand meiosis and mitosis, and so could you. By grounding the details in familiar plants, Capon brings clarity to plant form and the processes of growth. His instructive line drawings and color photos help, too. My favorites are his magnified cross sections of stained cells that make plants almost as beautiful and lovable at the microscopic level as they are in the garden. $17.50

6513 Bringing a Garden to Life by Carol Williams, 273 pages, 5¾x8¾, hardcover. Williams, on seeds: "Some...are demanding and idiosyncratic. ...Others are much more tolerant and will sprout almost anywhere given the slightest encouragement...Calendula seeds are friendly to gardeners. They germinate outside quickly and reliably in many sorts of weather. They are just big enough so that a single seed can be held between two fingers and placed exactly where one wants. They are big enough, too, that the naked eye can take in their intriguing form and texture: little crescents, striated within the curve and bumpy down the back, with a minute horn at each end." Williams' book is friendly like a calendula seed.

Williams, on the best transplanting days: "It should be just about to rain again, the sky overcast, perhaps with distant thunder rumbling and the air full of electricity. Wonders can be worked on days like this, and gardeners come to love them." Wonders can be worked with books like this and gardeners will come to love it.

The introductory garden book is the most difficult to craft of the entire genre. The perfect work must blend practical advice with inspirational guidance. It must be instructive without being didactic, philosophical without being pretentious, soulful without being saccharine. It must, in Williams' phrase, pick up the texture of the craft—"the proper sizzle of the batter in the pan before one breaks the egg." I've searched a long time for the one book I would give to any young aspiring first-time gardener and in Williams' work have finally found it. Winner of the Publisher's Weekly best book of 1998. NEW! $22.00

6515 Caring for Perennials: What to Do and When to Do it by Janet Macunovich, 191 pages, 8½x11, softcover. You can accomplish a lot in 15 minutes of focused work. You could, for example, successfully stake several drooping plants. Macunovich believes that if you follow her system, an average of 15' minutes per week will be sufficient to maintain a 10x10' perennial garden. She knows we don't have the time to do everything so she stresses prioritizing what needs to be done to keep the garden going. Her directions are clear enough to instruct beginners, yet creative enough to interest even experienced perennial gardeners. Using her own detailed 12-year records and working one simple bed with 36 cultivars, she takes you through a gardening year telling what she did to keep the bed beautiful, how, when and why and illustrates with color photos and instructive line drawings. Chapters on pruning; edging and weeding; dividing and mulching; and watering, fertilizing, planting and staking provide more detailed information. Includes a useful table with month-by-month maintenance recommendations for 70 different perennials. Enjoy a beautiful perennial garden with much less work! $17.50

6516 Chez Panisse Vegetables by Alice Waters, 344 pages, 7x10¼, hardcover. Wow, a cookbook that discusses vegetables by varietal names!...and focuses on how to pick out ones of the highest quality and keep them that way until you're ready to cook...and offers a dazzling repertoire to choose from: asparagus, shallots, cardoon, garlic, leeks, artichokes, chicories as well as the more common vegetables! No wonder food writer and gardener extraordinaire Roberta Bunker said we *had* to carry this book! I was enchanted by the elegant simplicity of many of these recipes. I never would have thought of caramelizing fennel using just olive oil then seasoning with salt and pepper and serving as a pizza topping. My impatient vigil for the first peas of the season got shorter since I started cooking pea vine shoots in early spring thanks to Waters. Put the still-damp shoots in a hot frying pan with oil or duckfat, season with salt, toss until just tender and lustrous green. Add a splash of water and serve. Says Waters, "handling... a vegetable in the kitchen before it is eaten is far less important for taste than what kind of variety it is, where and how it was grown, when it was harvested and how long it has taken to get to your kitchen. Cooking is only a small part of this." If Waters is right, Fedco customers already have a leg up in their quest for sublime eating experiences. Reduced for clearance. $30.00

6518 The Complete Book of Gourd Craft by Ginger Summit and James Widess, 144 pages, 8¾x10½, hardcover. Browsing through this sumptuous full-color guide to decorating gourds is like taking a walk through a museum. It will leave you gasping with pleasure, laughing with delight and generally awestruck. Three hundred inspirational photographs of gourd artistry will help guide you through 22 projects. Employs 55 decorative techniques and materials including woodburning, carving, painting, staining, waxing, basketry, inlay, weaving, decoupage, attaching pieces, making handles, lids and more. Plenty of how-to photographs and detailed easy-to-follow instructions. For beginner and experienced gourders, includes horticultural basics; cleaning, cutting and finishing tips; seed and supply sources. $26.00

6520 The Complete Medicinal Herbal: A Practical Guide to the Healing Properties of Herbs by Penelope Ody, 192 pages, 8x11¾, hardcover. As informative as it is beautiful, this easily accessible and useful reference is also a visual feast. It will invite you to linger for long hours with its extraordinary photographs or provide you with a rapid reference to practical details such as where to find the flavonoids in burdock. An A-to-Z of over 120 herbs with detailed photographs of the parts used medicinally, descriptions of traditional uses, active ingredients, therapeutic principles, proper preparations and dosages offers the most graphic herbal instruction course I've ever seen. Not your usual plant drawings here: You'll see close-up photos of the active parts—be they seed, root, leaf or bark—and dishes and jars of the tinctures, ointments, creams and oils in their true colors.

Your immune system need strengthening? A reference section arranged by ailments and sprinkled with case histories leads you to two possible remedies (astragalus and echinacea), with their actions, suggested uses and dosages and proper precautions. Why do the Chinese use schizandra in the spring? What was Gandhi's opinion about flax seed? Why did overindulgent Romans eat raw cabbage? From the fabulously illustrated first chapter which "looks at the major herbal systems in different parts of the world throughout the ages," to the detailed reference materials in the last chapter, this book will satisfy and delight as it instructs. $30.00

Reprinted from The Flower Farmer (#6544) by Lynn Byczynski ©1997. Illustrations by Robin Wimbiscus © 1997. With permission from Chelsea Green Publishing Co., White River Jct., VT.

6524 The Contrary Farmer's Invitation to Gardening by Gene Logsdon, 177 pages, 6x9, softbound. Recipe for Logsdon's unique brew: Mix one teaspoon rural nostalgia, two tablespoons economic analysis, add a cup of common sense and another of practical craftsmanship, season with a dollop of curmudgeonly spice and a dash of suspicion of government, simmer to a rant, crank vigorously. The results: Preposterous? Sometimes. Thought-provoking? Definitely. A good read? Absolutely! Some misinformation? Unfortunately, yes, especially when Logsdon allows his anti-government feelings to get in the way of economic facts. His rant on sales tax is inaccurate and should have been edited out. Some gems? For sure. The best ones: Asking why have we neglected growing grains in our backyard gardens and how can we begin again? Why have we allowed deer and other wildlife to attain the status of sacred cows and how might we deal with the growing destruction they cause our gardens and farms? Contrasting the potential of 111 million citizens each raising in their spare-time on home-grown feed from 3 to 100 laying hens in a decentralized "Little Red Hen" economy with a proposed complex of five animal factory units, each housing 2.5 million hens, requiring a total of 10 *million* bushels of corn per year, 210 *million* pounds of soybean meal, and producing more than 80,000 tons of manure per year, the same output as 2 *million* people. Consider the social and economic costs of the huge centralized operation, the wear and tear on roads to haul in the grain, the disposal of all that manure and the incredible stench generated. NEW! $17.00

6538 Edible Flowers from Garden to Palate by Cathy Wilkinson Barash, 250 pages, 8½x9, softcover. While at a NOFA-NH gathering I was enchanted by a talk given by flower expert Hillary Nelson who recommended Barash's volume as the best in the field. Beginning with her big ten, which includes nasturtiums, pansies, signet marigolds, squash blossoms and sage, Barash branches out to such lesser known delights as rosemary, fennel and radish flowers. Her elegant yet simple recipes, drawn mostly from noted restaurant chefs, make gastronomic leaps. Imagine using sage as your major pesto ingredient, scarlet runner bean flowers sautéed with potatoes and onions, or southern frying okra blossoms. Barash warns that some flowers are poisonous while others should be consumed only in moderation. Insist on organically grown flowers. Never eat flowers picked from the side of the road. Introduce new flowers into your diet in small quantities. Above all, know what you're eating. For example, young pea shoots, tendrils and flowers are edible, while the flowers of ornamental sweet peas are poisonous. $24.50

6544 The Flower Farmer: An Organic Grower's Guide to Raising and Selling Cut Flowers by Lynn Byczynski, 207 pages, 8x11, softcover. I expected a book by the publisher and editor of the highly informative Growing for Market newsletter to bloom with marketing insights, and I wasn't disappointed. Byczynski, a professional flower grower, knows the flower industry well and has good advice about choosing and creating markets and setting prices. As a bonus, she includes profiles of thirteen growers from around the country, telling what they do and how they found their niches. But hers is much more than a marketing book. Her love of flowers comes through clearly, and her advocacy of organic practices, even though they don't bring any extra income in flower production, is refreshing. Although her cultural instructions are more than adequate, Byczynski rightfully calls her chapter on "Harvest and Post-harvest" the most important in the book. She asks us to "learn to think like a flower," sharing her tricks for choosing the right moment and techniques to harvest for maximum vase life. Now that I know the importance of sanitation in all my tools and receptacles, and have a better idea of the basics of design, my bouquets will last longer and give more pleasure. NEW! $24.50

6547 The Fragrant Garden: A Book about Sweet Scented Flowers and Leaves by Louise Beebe Wilder, 407 pages, 5½x8½, softcover. Who has not thrilled to that ecstatic first whiff of spring in the air? Who has not savored the rich redolence of freshly-turned earth? Who has not been stirred by the fecundity of April's misting rains? "Fragrance speaks to many to whom colour and form say little and it can bring as irresistably as music emotions of all sort to the mind." Yet, laments Wilder, gardeners today seldom plan for fragrance, an omission which can be readily remedied by taking her garden tour through the seasons. Reprint of a 1932 classic originally published as The Fragrant Path. $8.00

6554 Garden Flowers Coloring Book by Stefen Bernath, 40 pages, 8¼x11, softcover. These 40 popular flowers, 37 of which are offered by Fedco, cover almost the entire spectrum of color. Dover book includes color plates on the cover to guide young illustrators. $2.80

6575 Give Peas a Chance: Organic Gardening Cartoon Science by Peter Barbarow, 222 pages, 8½x11, softcover. A soil-building book in the same vein as Marx for Beginners. Barbarow takes the dense soil particles of a potentially sticky topic, and breaks them into friable humus with that finest of amendments: humor. Although perhaps not 100% scientifically rigorous, Barbarow makes his points with creative comparisions. For example, "What is a seed? A seed is a space ship. The space ship contains a tiny astronaut (the embryo), and all the stored food reserves and rocket fuel (proteins, oils, starch) the astronaut will need during his long journey through the cold dark limits of earthly winter." Other comparisons feature the compost pile as a pet animal, the damping off-fungus as a lumberjack, and photosynthesis as the "state-of-the-art in energy technology, micro-miniaturized to a scale that makes the best efforts of the electronic industry look hopelessly stone-age." A good choice for a beginner's first gardening book; plenty for the grizzled gardening veteran as well. Reduced for clearance. $12.00

6576 Growing Great Garlic by Ron L. Engeland, 213 pages, 6x9, softcover. Garlic, the world's second most important allium crop, behind onions, is rapidly winning new converts. If garlic is your passion, or even just your avocation, you'll enjoy this book. Engeland, an expert who successfully grows and sells over 100 strains and even markets a paper he makes from the discarded bulb wrappers, has written the definitive guide to growing garlic. He devotes thirty pages to varietal differences, adds a fascinating chapter on history, and provides in-depth cultural information on growing, harvesting, storing and marketing garlic. $14.00

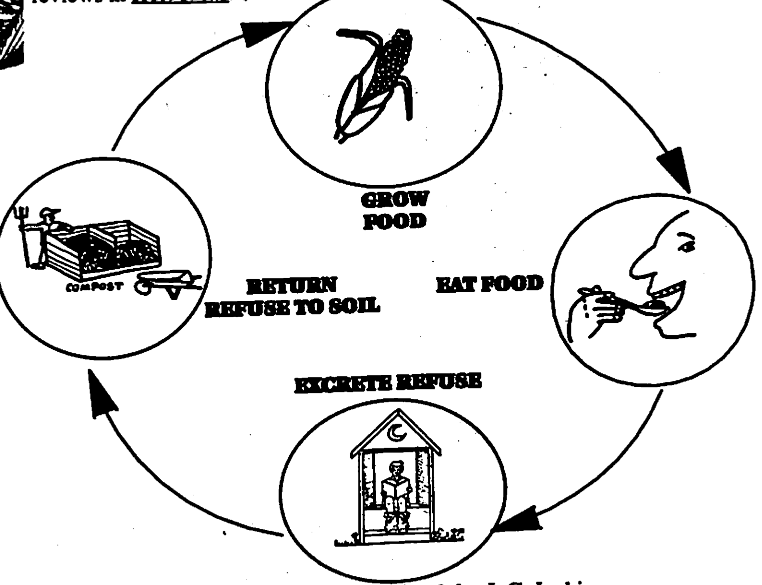
6578 Heirloom Vegetable Gardening: A Master Gardener's Guide to Planting, Seed Saving and Cultural History by William Woys Weaver, 439 pages, 7½x9½, hardcover. Whatever else he accomplishes on this planet, William Woys Weaver has justified his existence with this extraordinary life work. Weaver has lived the historical gardener's ultimate fantasy, poring through hundreds of gardening classics, seed catalogs and cookbooks assembling the definitive histories of some of our most revered heirloom varieties. His research must have taken many years and the value of his work is inestimable. In this catalog alone, I've made more than 20 revisions of the historical data based on his work. Sure, I have a few quibbles. Weaver is a bit of a snob about the sanctity of the truest, oldest varieties. We *welcome* improvements in the original strains, though wishing, like Weaver, that the nomenclature weren't so tangled and the commercial aliases so prevalent. I would love to see a sequel volume focusing on more of the varieties developed during the Golden Age of classical plant breeding from 1870-1930. Then, too, Weaver is a tad harsh in calling modern sweet corns "sugar enhanced Coca Cola corns." I had occasion in 1998 to trial Stowell's Evergreen, perhaps the oldest surviving sweet corn extant in commerce, alongside 1970s classic Silver Queen, by no means the sweetest of modern hybrids. Stowell's did not come out well in the comparison. I respect the old, but also believe older is not necessarily better. Those caveats aside, no serious seed saver or garden historian will want to be without Weaver's volume. From it we've assembled a list of more than 65 old varieties to find for our trials. Soon we will be able to thank Weaver for helping return more of the best of the old to our seed catalogs and gardens. NEW! $44.00

6580 Hemp Horizons: The Comeback of the World's Most Promising Plant by John W. Roulac, 211 pages, 6x9, softcover. Maybe you still think that most folks who are promoting industrial hemp are just using it as a cover to legalize marijuana. *Au contraire*, Roulac makes a strong case that hemp advocates are driven not by hedonism, but by ecological fervor. Once the most important industrial crop in America, hemp has for sixty years been held hostage in the campaign to eradicate marijuana. Roulac traces the fascinating history of its suppression in detail. The Drug Enforcement Administration continues deliberately to obfuscate the very real botanical differences between hemp and marijuana, placing impediments to revitalizing a hemp industry which could confer substantial economic and ecological benefits. Hemp could be used to make superior textiles, fine paper products, sturdy yet lightweight building materials and ideal nutritional supplements. Worldwide consumption of paper products alone has increased nearly twentyfold since 1913. Anyone living in our state is keenly aware of the concomitant timber overharvesting. Hemp could help spare our declining forests, as well as reduce dependence on our heavily concentrated pesticide-ridden cotton agribusiness. While carefully outlining hemp's potential benefits to a sustainable agricultural economy, Roulac painstakingly avoids the exaggerated "miracle crop" claims made by some adherents. The lack of modern harvesting and processing technologies and the paucity of germplasm to breed superior strains are, in addition to DEA obstruction, among the many obstacles which must be overcome before hemp can regain its rightful place in commerce. Given continued enlightened advocacy, versatile hemp, with more than 25,000 known uses, could become the peanut of the 21st century. NEW! $18.50

6586 Herbal Note Cards by Sue Szwed. A great way to send healing energy to your friends, this set of six cards features some of our favorite illustrations from A Woman's Book of Herbs (see #6696). If you haven't read the book, glance through Fedco Seeds' catalogs to find other examples of Sue's work, including our 1995 cover. Borage, heartsease pansy, yarrow, mugwort, dandelion and sarsaparilla root are illustrated, with a brief note about usage on the back. Blank inside, printed on pastel shades of lavender, cyprus green, white, bluestone, yellow gold and rose recycled paper, the 4¼x5½" cards with black line art come with matching envelopes. $5.50

6587 Herbs for Health and Healing by Kathi Keville, 374 pages, 6½x9½, softcover. Herbal medicine, properly practiced, argues Keville, gets to the sources of physical and emotional imbalance, rather than treating just the symptoms. This manual can help you replace many quick-fix drugs with herbal remedies. Particularly handy because it is organized by general types of maladies rather than by specific herbs, its many useful formulas emphasize the synergy achieved by herbal combinations. Includes chapters on women's, men's and children's health as well as herbal first-aid and aromatherapy. Those new to using herbs will be reassured by Keville's ample historical information and plentiful citations of scientific studies to back her claims. Do you know that raspberries can help ease morning sickness in pregnancy or that small amounts of powdered cayenne pepper and ginger sprinkled into socks and gloves can help prevent frostbite? NEW! $15.00

6588 Hort Ideas Published monthly by Greg and Pat Williams. An invaluable newsletter full of intriguing summaries of the latest research on a wide variety of horticultural topics including trees, shrubs, vegetables, flowers and horticultural products and accessories. Topics in a recent issue ranged from disease susceptibility of open-pollinated sweet corn varieties to a listing and description of all 12 All-America Selections for 1999 to announcement of a new vaccine for Lyme disease which is reportedly 80% effective. We discovered many of the books in this section through reading reviews in Hort Ideas. $20.00



From Humanure Handbook by J. C. Jenkins.

6594 The Humanure Handbook by J. C. Jenkins, 198 pages, 7¼x9, softcover. To paraphrase the late great Lenny Bruce, "everybody does it, nobody talks about it." Jenkins talks about it. He does not lead you in gently. He gets in your face about it. His is a self-published manifesto. He is outraged that each of us wastes nearly a thousand pounds of humanure every year, deposited in sewers and septic systems throughout the land. What does that have to do with the state of our agriculture? Everything. Americans, according to Jenkins, squander nearly 250 million tons of solid waste each year. Meanwhile, global consumption of artificial fertilizers rose by almost 900% from 1950 to 1980. The charts and graphs in his first chapter make the inescapable connections. Nevertheless, many of us will still be horrified that Jenkins advocates the use of humanure as a fertilizer. Why are we Westerners so fecophobic? Jenkins is not shy about probing our psychological hangups which ultimately he ascribes to "worms and disease"! Neither is he afraid to address the scientific basis for our qualms nor to advocate solutions which he believes can overcome those legitimate fears. The answer, says Jenkins, is to use low-tech sawdust toilets and to thermophilically compost our refuse into rich pathogen-free humus for our gardens. And he goes into the details about how to do it, based on his own 15 years of experience. Not convinced? Ponder Jenkins' opening paragraph: "The world is divided into two categories of people: those who shit in the drinking water and those who don't. We in the Western world are in the former class...After polluting the water with our body's digestive system byproducts, we flush the once pure but now polluted water 'away.' Away to where? Good question." Many of us think "shit" is an obscenity. Maybe Jenkins will do to our concept of shit what Bruce did to the concept of obscenity! $19.00

6602 Identifying Diseases of Vegetables by A.A. McNab, A.F. Sherf, and K.K. Springer, 62 pages, 8½x11, spiralbound softcover, University of Pennsylvania. Was that hideous sunken black spot near the stem of your tomato caused by *Alternaria solani* or by *Colletotrichum coccodes*? Excellent photographs facilitate accurate disease identification. Includes all the popular vegetables and all the common diseases which affect them. $16.00

6610 The Insect Workbook by the Entomological Society of America, 80 pages, 8½x11, softcover. Revised edition of this Fedco family staple formerly entitled Coloring Fun with Insects. We sold over 700 copies of the first edition. Forty drawings of common insects for coloring, with non-pejorative information about each insect's natural history. Gives elementary-age kids a chance to have fun while learning some basic entomology, and raises everyone's consciousness about insects. Now includes step-by-step instructions which enable kids to conduct their own field studies as well as build pit traps and ant farms. $5.50

6612 Integrated Pest Management for Potatoes in the Western U.S. by the Western Regional IPM Project, 146 pages, 8½x10¾, softcover. Don't let the title fool you. Whether you plant in Maine or Idaho, this is *the* book for potato growers. Not restricted to pest management, it tells everything you need to know about growing potatoes. Discusses the four components of IPM: accurate pest identification, field monitoring, control action guidelines and effective management methods. "In an IPM program pest management is coordinated with production practices to achieve economical protection from pest injury while minimizing hazards to crops, human health, and the environment." Graphic photographs will help you identify insect and other animal pests, diseases of leaf and tuber including bacterial, viral and fungal infections, developmental disorders and weeds. The accompanying text offers management strategies for control and prevention, whether you are troubled by the parasitic weed dodder, the viral-transmitted corky ringspot, or any of dozens of other potato pathogens. Appendix includes a glossary, references for further readings and an index of diseases and disorders. Did you know that the potato is like the brain with an inner and outer medulla and a cortex? That it continues to respirate, suberize and convert starches to sugar in storage? Reduced for clearance. $24.00

6617 Maine Directory of Herbal Businesses, published by ParaGraphs, the publisher of Herbal News, 46 pages, 8½x11, softcover. A testimonial to the growing significance of herbs in many of our lives, here are 102 herb-related businesses in 88 towns. Want to know who is making herbal soaps, who offers herbal products for animals, who conducts classes, workshops and herb walks? Looking to tour a beautiful herb garden and come away with some organically grown seedlings? It's all here. From Alchemilla to Wild Rose Creations, a snapshot of Maine's burgeoning herbal community. NEW! $6.50

6619 The Male Herbal: Health Care for Men & Boys by James Green, 278 pages, 6x9, softcover. A good male herbal, like a good man, is hard to find. Herbals by, and largely for, women abound; men have been more hesitant to embrace the recent renaissance. To his credit, Green asks why. Although not all his speculations are free from by-now stereotypical gender role pigeonholing, enough are sufficiently profound to provoke the kind of deep thought we men need to nudge us away from some of our self-destructive tendencies. Green is refreshingly original, highly opinionated, and generous in sharing information not widely available to men, whether teaching us how to strengthen our hearts, how to reduce the negative impacts of stress in our lives, or how to reduce the vulnerability of the prostate, "our uniquely male chamber of silence where we store our most private concerns." One of Green's hypotheses is likely to change forever my way of evaluating lettuces. I have been downgrading bitter lettuces, but Green blames the avoidance of bitter flavors in Western diets for many sexual and immune system deficiencies. $14.00

6620 Managing Cover Crops Profitably Published by the Sustainable Agriculture Network, 2nd ed., 212pp., 9x7½, softcover. An expanded and much-improved reissue, using farmers' and field researchers' results from across the country. Covers 19 different crops detailing benefits, management, and suggested cultivars with additional chapters on building soil fertility, recommended rotations and cover crop use in pest management. A series of excellent charts organize the information in useful and convenient form. As with other SAN books (see The Real Dirt #6650), much of the information comes from the experience of real farmers and real farms, not the lab of some chemical company. As the introduction says, "Think of this book as a tool chest, not a cookbook." No one answer to fit all problems but a lot to work with. NEW! $20.00

6624 Native American Gardening: Stories Projects and Recipes for Families by Michaël J. Caduto & Joseph Bruchac, 158 pages, 7x10, softcover. If you're of European descent you may be uneasy about your relationship to the Native peoples of our continent. Was life idyllically in balance with nature before Europeans colonized this land? Can we restore balance by learning to practice Native wisdom? Or does that amount to stealing and colonizing people's spirituality now that we've taken everything else? Native American Gardening answers the spirituality question outright. "Don't belittle sacred ceremonies and beliefs by trying to imitate them...Study Native ways as a lesson to be understood without being imitated...Learn more about your own spiritual tradition and how those beliefs support your being close to, and caring for, Earth and other people." This wonderful introduction to Native American gardening ways interweaves legends, instructions, recipes and history. Learn how to make rattles, jars and birdhouses from gourds, dolls from cornhusks, and traditional scarecrows. Learn how to use native seeds to plant a Three Sisters garden. Kokopilau, the humpbacked flute player of Hopi tradition, spreads seeds, music, culture and fertility wherever he travels. We can do the same by honoring the Circle of Life in our own gardens. Pitched at children, but full of remedial information for adults who grew up in the era when most schoolroom history instruction was nothing more than an apologia for "manifest destiny." $16.00

6632 The New Seed Starters Handbook by Nancy Bubel, 385 pages, 6¼x9, softcover. Revised edition of a gardening classic by a 30-year gardening veteran. If you start your own seeds indoors, you'll find many practical suggestions. Includes new sections on raising garden flowers, wildflowers, and trees and shrubs from seed. $16.00

6635 The Northeast Cover Crop Handbook by Marianne Sarrantonio, 118 pages, 8½x11, spiral-bound softcover. From small family gardens to large farms, covercropping is the keystone of sustainable agriculture. Cover crops restore depleted soils and maintain and improve soil fertility and tilth. The Northeast Cover Crop Handbook is the best source of information I have found on cover crops and their uses. This workbook, written for growing conditions in the Northeast, is designed to help farmers find the best crops to meet their needs. Learn which crop is optimal for which application, how to judge the effects of nitrogen from cover crops, and how to solve problems when they arise. Use the appendix to find planting information, expected yields of organic matter and nitrogen, and problems to watch out for. A most useful guide and resource. $15.00

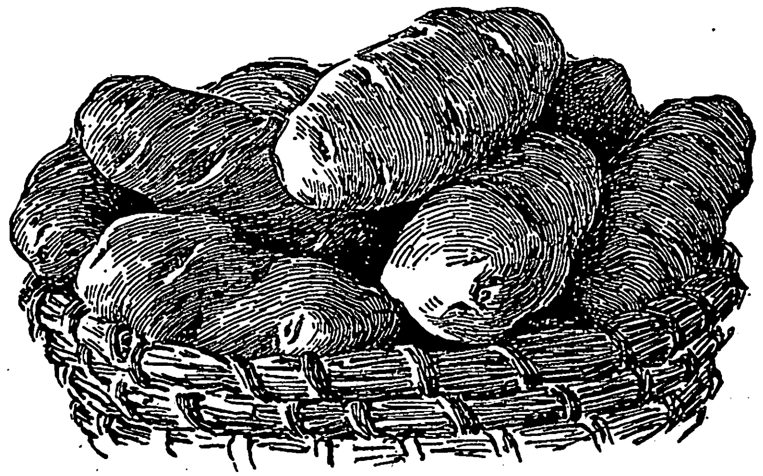
6639 The Organic Gardener's Handbook of Natural Insect and Disease Control edited by B. Ellis and F. Bradley, 534 pages, 7½x9¾, softcover. Plants attacked by diseases or insects can reveal valuable information about soil health and gardening techniques. Use this complete reference, including a 250-page alphabetical guide to identification and solution of plant problems, 80 pages of full-color insect photos, and 140 pages on plant diseases and modern control strategies, to help you identify and successfully treat disease and insect problems in gardens, woods, orchards and flower beds. $17.50

6646 Pictorial Guide to Perennials revised edition, by M. Jane Coleman Helmer and Karla S. Decker Hodge, 128 pages, 8x10¼, softcover. If, like me, you have just begun delving into the fascinating field of perennials, you need a book with lavish detailed pictures. Pictorial Guide delivers more than 300 of them, along with basic descriptive information, propagation methods and hardiness. Now I have the perfect reference when a customer suggests an additional perennial for our catalog, or when I just want to ponder what I'm going to put into those new beds. If you've been longing to learn about perennials, but have been daunted by all the choices, here's your starting point. $14.00

6647 Planting Noah's Garden: Further Adventures in Backyard Ecology by Sara Stein, 448 pages, 7¼x9¼, hardcover. Kill your lawn, advises Sara Stein, and then tells you how. Why kill your lawn? Because it is monotonous. "What if everybody dressed the same?" asks Stein. "Why should yards wear uniforms?" Americans lavish more chemical fertilizers on their lawns and backyard gardens than our whole agricultural system uses on our farms. Such practices have unwittingly turned the suburban landscape into a barren ecosystem. So Stein and her husband Marty discovered quite by accident when they groomed their property in the customary manner only to find that songbirds fled and wildlife disappeared. Out of that experience Stein wrote her groundbreaking book Noah's Garden which struck a responsive chord among thousands of readers. In this, the sequel, Stein tells how to restore a rich diverse native ecosystem to your backyard. You may want to skim the rambling anecdotal yet inspiring first part to get right to the grubby guts of the work. Fortunately, Stein's 176-page how-to section is well-organized, thorough and detailed on everything from making scale drawings of your plot, to organizing group plant orders, to building small ponds and bogs to constructing birdhouses and wildlife habitats. NEW! $40.00

6648 The Potato Field Manual edited by A. Ulrich, G. Kleinschmidt and L. Sandvol, 72 pages, 3½x7, softcover. A handy little manual loaded with color photos. Covers nutrient deficiencies, a variety of diseases (virus, bacteria, nematodes, etc.), physiological disorders, chemical injuries and insect damage. A must for the serious potato farmer. $7.00

6649 The Potato Harvest Cookbook by Ashley Miller, 170 pages, 8x10, softbound. A pleasing and colorful introduction to the wonderful world of the potato, the fourth largest food crop behind only wheat, rice and corn. David Cavagnaro's photographic profiles of 33 varieties bathe Miller's descriptive prose in a panoply of color. Miller includes historical background, variety and cultural information, and storage and cooking instructions for the beloved spud. Recipes range from the elegantly simple, such as tiny new potatoes with parsley and mustard dressing, to the simply elegant, *gâteau des pommes de terre*, potatoes mashed with leeks and sun-dried tomatoes in a puff paste shell. Recipes like Indian Potato and Pea Soup; *Ajlouke*, an appetizing North African dip for *crudités*; and *Lefsa*, potato crepes from Norway; attest to the universal appeal and versatility of "the most important vegetable in the world." We confess to a special interest in this book. Many of the potatoes pictured came from varieties for which we provided the seed stock. Watch out, the captions for Green Mountain and Pimpernel got crossed up in layout. NEW! $20.00

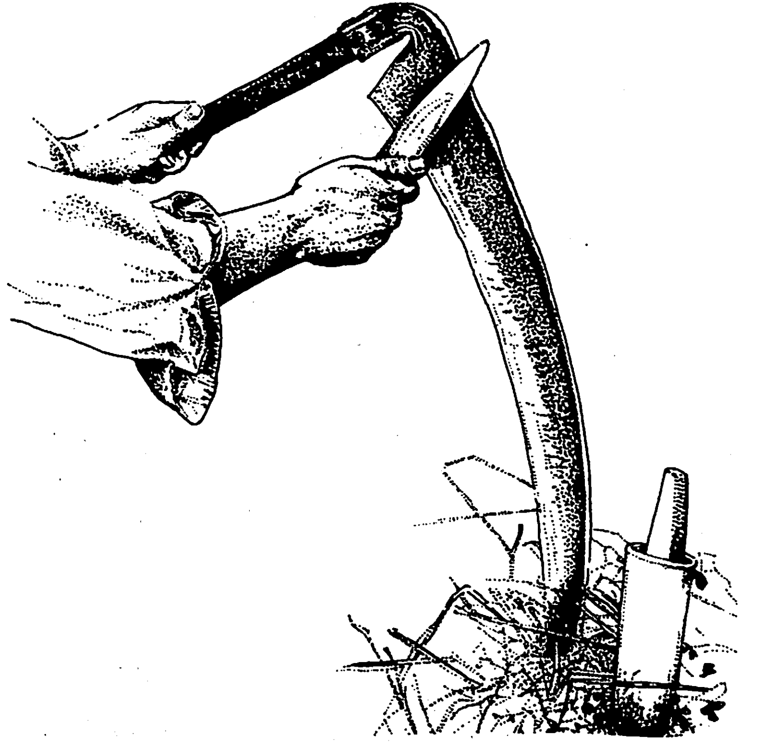


6650 The Real Dirt edited by Miranda Smith and members of NOFA and Cooperative Extension, 264 pages, 8½x11, softcover. Here is a snapshot of best organic management practices in the early 1990s. The authors and editors devoted nearly five years to researching, compiling, writing, reviewing, condensing and weaving an immense amount of material into The Real Dirt's anecdotal praxis. Here you will meet many of the leading practitioners of organic agriculture in the Northeast—some like Eero Ruutilla, Elizabeth Henderson, Julie Rawson and Jack Kittredge longtime Fedco customers—who offer hands-on courses in soil management, rotations, composting, pest and weed management, greenhouse production, marketing and much more. $13.00

6651 Rebirth of the Small Family Farm by Bob and Bonnie Gregson, 64 pages, 8½x11, softcover. This is the book for small farmer wannabees. Without benefit of previous farming experience, the Gregsons made the transition in their mid-40s from the corporate management world to a small family CSA farm on an island off the coast of Washington. Eight years later, having achieved success after several false starts and failures, they were ready to tell their story. Tell they do, in a simple accessible practical manual rich with details of farm economics. This convincing case study argues that others willing to follow ten basic principles can replicate the Gregsons' success. Appendix includes the CSA share each subscriber received from them in 1995. $8.50

6654 The Rodale Book of Composting edited by D. L. Martin and G. Gershuny, 278 pages, 6½x9¼, softcover. Most compost books are either too technical or too simple to be useful, but this one falls nicely in the middle. Its technical side informs but does not overwhelm. Its simple instructions and charts guide first-time composters. Covers composting techniques useful for backyard gardeners and large-scale farmers, tips on indoor composting, earthworms, compost bins, soil amendments and much more. Reduced for clearance. $13.00.

6656 Root Cellaring, 2nd ed., by Mike and Nancy Bubel, 297 pages, 6x9, softcover. According to the Bubels, a good root cellar provides a "direct, earthy and deeply satisfying connection between our summer efforts in the garden and our winter need for fresh wholesome food." If thoughts of crisp carrots in March set your mouth watering, let the Bubels take you on a well-illustrated tour of root cellar designs. They can also help with varietal selection, optimal storage conditions, and even recipes. $15.00



From The Scythe Book by David Tresemer.

6665 The Scythe Book by David Tresemer, 128 pages, 5½x8½, softcover. In this information age, knowledge is disappearing. As power replaces intelligence, and "efficiency" substitutes for sound practice, the commonplace skills of yore are becoming uncommon and harder to learn. In The Scythe Book David Tresemer seeks to reverse that trend, offering not merely an instruction manual for the use of a tool (how to stand, how to mow, how to sharpen and care for your scythe), but an argument for the superiority of the scythe over mechanical mowing for small farmers and growers. Tresemer has done a lot of research into the history of the scythe and its usefulness and makes his case entertainingly and convincingly. Anyone who owns a scythe should read this book and anyone who reads it will want to use one. $14.50

6672 Seed to Seed by Suzanne Ashworth, 240 pages, 8½x11, softcover. Now considered the classic reference in the field with detailed instructions on seed saving techniques, including harvesting, drying, cleaning and storage, and proper isolation distances to maintain purity. Spectacular photographs by David Cavagnaro, many taken at the Seed Savers Exchange's lovely gardens at Heritage Farm, enhance Ashworth's text. This is the book our own seed growers use. $20.00

6680 Sex in Your Garden by Angela Overy, 120 pages, 9x9, softcover. Although a vowel away from being a perfect pun, even the author's name sets the proper tone of hilarity. Botany in school was never taught like this! Because they are rooted in the ground, plants need to attract pollinating intermediaries to complete the act. Overy unabashedly compares plant and human strategies for achieving sexual consummation. We turn out to have a lot in common! Some plants, such as the dandelion, are promiscuous—fertilized by a multitude of insects. Others like monkshood are faithful and devoted, admitting only bumblebees. Some are gaudy and extroverted, others subdued and introverted. Both people and plants exploit the advantages of semiconcealed sexual parts. Both use hair to attract and repel. Plants offer bribes like nectar, pollen and shelter, humans offer bribes like, well, never mind! Plants even have their criminal elements like venus's flytraps who murder their pollinating guests. Overy's stunning color photographs will stimulate the prurient interest of all gardeners. I expect a few Madison Avenue types will also draw inspiration for their next advertising campaigns. Reduced for clearance. $18.00

6684 Sharing the Harvest: Community Supported Agriculture in America by Elizabeth Henderson with the late Robyn Van En. Van En, co-founder of CSA in North America, and Henderson, a leading practitioner the past ten years, set out to revise The Basic Formula to Create CSA, the concept's organizing classic. Along the way, their project grew almost as exponentially as the number of practicing CSAs. After Van En's untimely death, Henderson vowed to carry on their work in Van En's memory. Sharing's prose is mostly Henderson's but the spirit of Van En still shines through. At once, a how-to manual for creating and growing a CSA, an historical documentation of CSA's rapid spread, and a profound social, political, economic and spiritual statement, Sharing will be the touchstone for the next generation in the evolution of CSA, a vital tool for maintaining, focusing and accelerating its momentum. Sharing is a must for anyone now connected with CSA and anyone who might wish to be in the future. Should we have a core group and what should be its responsibility? Should we have a work requirement and what are the ramifications for our community? How shall we constitute and price our shares? What can we learn from the mistakes of CSAs that failed? How can we connect with the citizens of our nearest city? How might we cooperate with other CSA in the area? Equally at home in front of a conference lectern or on a tractor seat, Henderson is the right person at the right time to address these issues, both from the practical and philosophical standpoint. She adroitly mixes nuts and bolts organizing precepts with instructive histories, while avoiding the trap of limiting CSA to any single agricultural school or ideology. She places CSA in the context of related social movements and broad issues like preserving farmland, freeing land from ownership constraints, ensuring food security and sharing the benefits of healthy food with the economically disadvantaged. I have been privileged to be one of her editors, and treasure our special friendship which goes back nearly thirty years. Scheduled for March publication; will be backordered until available. NEW! $29.00

6690 Stella★Natura: 1999 Kimberton Hills Biodynamic Agricultural Calendar edited by Sherry Wildfeuer, published by The Bio-Dynamic Farming and Gardening Assn., 40 pages, 9x12 unopened. "Down-to-earth advice for gardening with cosmic rhythms." Contains lunar and astronomical charts correlated with planting data which many of our customers find valuable, as well as thought-provoking articles which make biodynamic rationales and practices more accessible. This year, I was particularly drawn to four of the essays, two of which argue that the very concept of the National Organic Standards administered by the USDA is flawed. Equally relevant was Harald Hoven's plea that growing biodynamic seeds is as important as making biodynamic compost. Most delightful was "It Probably Won't Start," by John Peterson, my favorite essayist in the CSA movement, spinning a most improbable tale about how he came to embrace biodynamics, which even if he made it up on the spot to entertain a reporter, is too good to miss. $11.00

6692 Sweet Potatoes for the Home Garden with Special Techniques for Northern Growers by Ken Allan, 204 pages, 5½x8½, softcover. Sweet potatoes, like magnolias and mint juleps, more easily conjure images of pillared plantation houses and manicured fields of cotton than of pothole-pocked roads and blackfly-infested meadows. Yet, with a little care, sweet potatoes do quite well here and north to Canada, Allan's native land, where he began growing them 20 years ago. Allan combines the lessons he has learned with the experience of his 18 trial growers throughout Canada, from balmy Vancouver Island in the "moderate zone" to frigid Whitehorse, Yukon Territory, in the "impossible zone" where a greenhouse is a necessity. His focus on cold climates sparked Alison's interest in sweet potatoes. Covers everything from preparing seed beds to avoiding chilling injury—sweet potatoes require warm temperatures even for storage. Includes directions for propagating slips, grafting and breeding. NEW! $20.00

6694 Weeds, Control Without Poisons by Charles Walters, 351 pages, 6x9, softcover. "Weeds are an index of what is wrong—and sometimes what is right—with the soil, or at least with the fertility program." Look around, walk the fields, listen to the weeds. Is your field full of bindweed and foxtail? Then the soil is probably compacted, has low fertility and doesn't drain well. Correct these problems and the weed problem will disappear. Do pigweed and lambsquarter come up each spring? Rejoice—your soil is in good shape—then do a little cultivating. Meet Walters' "cast of characters," 130 of the most troublesome weeds, each of which tells a story about your soil. Walter gives the botanical description, identifying characteristics, standard means of eradication and significance of each. With discussions of biochemistry, biodynamics, paramagnetism, radionics and dowsing, Weeds, Control without Poisons is chock full of nutty ideas, such as the weed pepper, a spray distillation of a collection of a broad spectrum of weeds to be applied to the weediest areas. Like the weed pepper, Walters' concoction is also a rich brew... of opinion and information. NEW! $25.00

6695 The Winter Harvest Manual: Farming the Back Side of the Calendar by Eliot Coleman, 56 pages, 8½x11, spiral-bound. The 44th parallel runs through Waterville, home of Fedco Seeds, and through Blue Hill, ME, site of the Colemans' year-round vegetable plot. It continues across the Atlantic through Provence and Tuscany, not regions one would associate with Maine. Although we do not share their mild winters and balmy climate, we get as much daylight as they do. If vegetables will grow through the winter there, why not here? Well perhaps because the ground is usually frozen and covered with snow. Adopting a quote from Buckminster Fuller, "Don't fight forces, use them," the Colemans asked themselves, "What likes cold?" and found thirty vegetables which can be grown through the winter under row cover in hoop houses with no other intervention. In these few pages, Coleman describes his methods of growing, harvesting and marketing: his preferred varieties and planting dates; successes and failures: the few simple tools he uses; materials and methods of constructing hoop houses and beds; and as a clincher demonstrates that growing lettuce in the winter in Maine is much more energy-efficient than trucking it from California. Coleman packs more information into 56 short pages than most authors ever achieve in quadruple the space. Here is his third consecutive classic—clear, compact and elegant. NEW! $15.00

6696 A Woman's Book of Herbs by Deb Soule, illustrated by Susan Szwed, 256 pages, 6x9, softcover. Previously entitled The Roots of Healing, has been re-released under the new title. Our relationship with the fairies at Avena Botanicals Herbal Apothecary, first kindled by the close proximity of our booths at Common Ground Fair, has grown closer each year. We long awaited the publication of Deb's first book, and you purchased nearly 600 copies in the last four years. If ever words could match the sheer artistry and joy of her extraordinary Avena gardens, Deb's lyrical passages come close, singing with the wholeness of her calling. Whether you seek simple, clear directions for making tinctures, decoctions, flower essences, salves and other remedies, the historical perspective to appreciate the healing tradition of witchcraft, or the inspiration to help find your own healing path, Deb guides the way. Fearlessly she breaks new trails, exploring a variety of women's concerns, offering support for women recovering from sexual abuse, and information on lesbian health issues never before addressed in an herbal. A wise woman in the best sense of the tradition, Deb has combined her 20 years of experience in growing, gathering, preparing and using herbs with her exceptional teaching skills and her profound affirmations to produce an enduring work of depth and vision. Illustrator Sue Szwed's work has graced our catalog for a number of years. $15.00

DISCOUNTED SPECIALS

The descriptions explain our reasons for carrying and then dropping these cultivars. We know you love bargains and we hate to disappoint you. We run out of most discounted specials during our February rush. Please order early.

6804 Golden Butterwax Bush Bean (56 days) *Phaseolus vulgaris* White-seeded wax bean with rich yellow color and straight pods. Less juicy, more meaty than Golden Rocky. Replaced by Buttercrisp, a superior variety. Resistant to CBMV, NY 15, tolerant to ozone damage. We have about 20 lb. left. B=2oz, 80¢, ~150 seeds, C=½lb, $2.50.

6812 Kiss 'n Tell Sweet Corn (81 days) *Zea mays* F-1 hybrid. Sugary enhanced bicolor hybrid ripens just before midseason. 7" ears with dark green husks hold their quality over a long picking period. Boasts attractive small kernels of rich sweetness with superb taste comparable to Sugar Buns. A little over 20 lb. left, order early or forget it. B=2oz, 80¢, ~435 seeds, C=½lb, $2.50.

6818 Supersweet Jubilee Sweet Corn (85 days) *Z. m.* F-1 hybrid. Supersweet with classic midseason eating quality. Combines the flavor, succulence and corny aroma of old favorite Golden Jubilee with the exceptional sweetness and holding ability of the supersweets. Long 8½-9" ears fill to the tip with exceptionally sweet tender yellow kernels, may be harvested over a long period. Discontinued because of poor sales. 90% germination. B=2oz, 80¢, C=½lb, $2.50.

6820 Sunrise Cantaloupe (85 days) *Cucumis melo* F-1 hybrid. We have discontinued this tropical melon with subtle interplay of textures and colors because we like Sweetie #6 better and because too few tried Sunrise. Its exquisitely flavored aromatic orange flesh closest to the seed cavity dissolves to a band of yellow then green flesh of increasing toughness toward the rind. Makes a fine addition to fruit salad or a good breakfast treat. We've dropped the price in hopes more of you will try it. Try our new Sweetie, too. Both are good and out of the ordinary. 83% germination. A=1g, 50¢.

6822 Express Pickling Cucumber (48 days) *Cucumis sativus* F-1 hybrid. Last call, this Express is about to leave the station. Handsome commercial pickler produces an awesome quantity of fruits in July when the market is still strong. The grower is no longer producing Express. We have just over 2# seed left from which we have made up 540 packets with 81% germination. *Order early; this train is bound for glory!* Tolerant to ANTH, ALS, CMV, DM, PM, resistant to scab. A=1/16oz, 50¢, ~57 seeds.

6830 Tatume Zucchini (61 days) *Cucurbita pepo* The original Mexican *calabasita* also popular in Texas, Tatume should be harvested at 3" when it resembles a tiny green slightly ovate pumpkin. Becomes too woody to eat as it matures, looking like an elongated 5x7" winter squash. Medium-dark green skin color. Vines crawl like pumpkins, so be prepared. Discontinued because sales were slow and we have found a tastier round zucchini, Eight Ball. Germination 75%. A=1/8oz, 50¢, ~20 seeds.

6832 Cucuzzi Gourd (65 days) *Lagenaria siceraria* We are discontinuing for lack of demand. Perhaps their vining habit is too rampant for most gardeners. When the fruits are still narrow and 8-16" long, they are decent zucchini substitutes with a stronger flavor. Left unpicked the fruits will grow up to 4' with curves on each end so they literally can be worn across your shoulders or used for a swing or two in the old ball game. Almost 2 lb. left; should last the season. A=1/8oz, 50¢, ~40 seeds.

6833 Kinko 6 inch (55 days) *Daucus carota* Open-pollinated Chantenay type. A good early season choice for its conical, stump-rooted carrots of deep color and sweet flavor with good cold soil emergence. Field-resistant to Alternaria. *Short crop this year.* A=1/8oz, 50¢.

6834 Estelle Carrot (56 days) *D. c.* F-1 hybrid. Estelle was intended as a processing carrot. It proved unsuitable for machine harvesting, but superb as a full-season home-garden carrot. Unfortunately, the grower was not interested in the home garden market and ceased production. Our five-year supply is finally dwindling so this is your last chance to enjoy its earliness, good interior color and sweet full-bodied Nantes flavor. We have slightly less than 2 lb. which we've made into 850 packets at 77% germination. A=1g, 50¢.

6836 American Purple Top Rutabaga (95 days) *Brassica napus* Replaced by Laurentian, a similar but superior variety. Only about 180 packets left at 83% germination. A=1/8oz, 50¢, ~875 seeds.

6842 Southport White Globe Onion (100 days) *Allium cepa* We have discontinued this variety due to lack of demand. Globular medium-sized bulbs with delicate snowy scales keep through first part of winter. Almost 1 lb. left, may make it through the season. We have about 230 packets at 88% germination. A=1/16oz, 50¢, ~350 seeds.

6850 Grazer Krauthäupti Batavian Lettuce (50 days) *Lactuca sativa* Swiss Batavian forms a soft green head with frilly savoyed leaves tinged purple at their ends. Lighter than Sierra or Canasta; almost equally slow to bolt. Discontinued because of crop failure. We have only enough seed carried over for about 80 packets, so order early. Germination 86%. A=1g, 50¢.

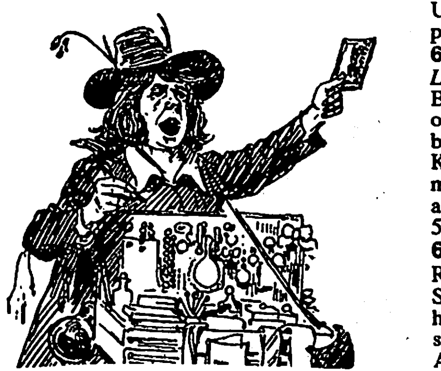
6852 Empire Iceberg Lettuce (72 days) *L. s.* Heads slightly larger than Ithaca and Summertime, but not as firm. We are discontinuing because demand for this large-headed type has steadily dwindled over the past fifteen years and sales are very low. 93% germination. A=1g, 50¢.

6858 Senposai (40 days) F-1 hybrid. Cross between Japanese Mustard Spinach (Komatsuna *B. rapa*) and regular cabbage with round medium-green leaves reminiscent of collards. Delicious sweet flavor. Senposai stands the entire summer and goes well into fall before bolting! Open plant habit needs 12-18" per plant. Discontinued because of crop failure. We have about 180 packets at 80% germination; order early. We hope to have back in all sizes in 2000. A=1/16oz, 50¢.

6860 Kailaan (65 days) *Brassica oleracea* (alboglabra group) Also known as Gai Lown. Prized for its mild green leaves and sweet, juicy stem, the former often sautéed or added to soups, the latter enjoyed in salads or stir-fries. Sales were slow, most customers prefer its replacement **#3396 Raab.** Better than 2 lb. left; call for bulk quote. 90% germination. A=1/16oz, 50¢.

6861 Mexibell Hot Pepper (70 days) *Capsicum annuum* F-1 hybrid. 1988 AAS. In 1998 sales were only half what they had been. Will our second attempt to discontinue Mexibell be greeted with as many howls of protest as the first? Mexibell was intended to be a novelty—shaped like a bell, but, SURPRISE!, unlike every other bell hiding some heat in its ribs. 2,500 Scoville units. 84% germination. A=.2g, 50¢.

6862 Green Boy Sweet Pepper (82 days) *C. a.* F-1 hybrid. From Agway. Blocky 3-4 lobed fruits once received the highest rating in the University of Maine bell pepper evaluations. About 80 packets left at 65% germination. A=.2g, 50¢.



6868 Black Prince Tomato (75 days) *Lycopersicon esculentum* Prince is too similar to Black Krim, its smooth round fruits much smaller (5-7 oz.) but with far fewer blemishes. Its flavor falls just a bit short of the complex richness of Krim, but unlike Krim, its appealing appearance allows it to be marketed. From Irkutsk, Siberia. Over 200 packets left at 80% germination; should last the season. A=.2g, 50¢, ~65 seeds.

6870 Peacevine Cherry Tomato (78 days) *L. e.* Rampant ind. Selected from Sweet 100 by Peace Seeds, and almost identical in fruit size and growth habit. Bears gazillions of sweet clusters each with 8 or so 1" fruits. Discontinued because of crop failure. About 120 packets of held-over seed germinate at 78%. We hope to have a full supply again in 2000. A=.2g, 50¢.

6872 White Potato Leaf Tomato (85 days) *L. e.* Ind. A wonderful example of tomato diversity, these large yellow-white fruits have a tart, almost vinegary, zip. Comments at our trial: "Almost like eating a lemon." "Put these in your salad and you won't need the dressing." Guess we were a little out there with this selection: Only 134 of you were sufficiently adventurous to try it in two years. Plenty of seed left at 76% germination. A=.2g, 50¢, ~65 seeds.

6874 Jackpot Tomato (71 days) *L. e.* F-1 hybrid. Det. We are discontinuing because sales have been consistently dropping for this midseason hybrid. For better flavor we recommend **#4260 Big Beef** or **#4268 Celebrity.** Ample seed left at 76% germination. A=.2g, 50¢, ~65 seeds.

6876 Lime Basil *Ocimum americanum* Discontinued because we could not find a seed source. Stood out in the 1997 basil trial, imparting a robust lime fragrance to the patch. More vigorous than lemon basil, darker green leaves with a nice limy flavor. 90% germination. A=.25g, 50¢, ~175 seeds.

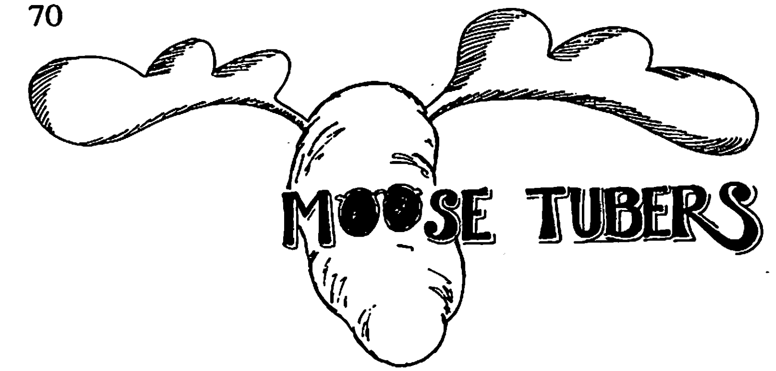
6878 Salmon Compliment Aster *Callistephus chinensis* Discontinued because of slow sales. Bright 4" flowers with short radiated petals, salmon tending to pink. 2½' upright plant has strong stems good for cutting. We have about 70 packets left at 65% germination, and should sell out very early. A=.25g, 50¢, ~110 seeds.

6879 Primrose Lady African Semi-Dwarf Double Marigold *Tagetes erecta* Profuse creamy yellow blooms on sturdy bushy plants. Discontinued because only 35 packets sold last year. We have about 80 packets at 65% germination. A=.1g, 50¢, ~30 seeds.

6880 Spotted Monkey Flower *Mimulus* x *hybridus* 'Grandiflorus' Like pansies, the yellow and orange blooms are freckled with browns, giving them an irreverent monkey-face effect. Start indoors in April (do not cover the seed) and transplant in 4 weeks. Likes cool weather, but doesn't tolerate frost. Likes partial shade and moist locations, dislikes drought. Discontinued because too few of you were willing to monkey with it. 86% germination; enough packets to get us through the whole season and more. A=.1g, 50¢, ~2,500 seeds.

6884 Panorama F2 Snapdragon *Antirrhinum majus* Discontinued because we liked the Rockets better in our trial. Non-hybrid produced from hybrid parents. High-quality blended mix shows golden yellow, rose, orchid, bronze, red and white flowers with soft fragrance. 20" plants bloom a long time. Refrigerate seeds, then expose to light to germinate. Sow indoors in cool place 8-10 weeks before setting out. 75% germination. A=.2g, 50¢, ~1,460 seeds.

6888 Lamb's Ear *Stachys byzantina* Also known as Wooly Betony. 1' perennial with soft fuzzy leaves and purple flowers has a silvery appearance. Needs light to germinate. Discontinued because of slow sales. Zones 4-8. About 140 packets left at 67% germination; may not last beyond February. A=.2g, 50¢, ~110 seeds.



Certified Seed Potatoes, Onion Sets, Sunchokes & Sweet Potatoes

Welcome to our 13th listing of high-quality certified seed potatoes. We also offer Dutch-grown onion sets, Maine-grown sunchokes, and sweet potato slips. Our extensive potato list ranges from new releases to old heirlooms, from early-maturing moist red-skinned boilers to late-maturing dry russets for storage, with a wide selection of flesh colors, textures and flavors to tweak your interest and tantalize your palate. How to choose? Our variety descriptions begin on pg 72. For an overall comparison see the variety chart on pg 77.

One of the most enjoyable parts of choosing which varieties to list (besides the growing and tasting!) is my contact with the growers. The pleasure of talking to real people about farming inspired our family trip to Aroostook County and New Brunswick last summer where I was able to put faces to the voices on the phone. We learned that these suppliers are conscientious farmers, caring for their soil with rotation crops of grains and clover. They were all warm and gracious people who gave their time and opened their homes to us. Potatoes connect me to people and to the earth. Grow some potatoes and feel the connection, too.

We value your input. Any feedback or suggestions are appreciated and often help us choose what we offer. Want to get involved in potato selection? Join our network of trial growers. Call me at (207) 873-7333 or write to PO Box 520, Waterville, ME 04903.

Alison LaCourse, potato coordinator

New for 1999!

- AC Chaleur - early white with high yields and great flavor.
- Austrian Crescent - heavy yields of golden crescents.
- New selections in the Collections -
  - * Specialty Organics - all Maine grown *
  - * The Classic - varieties released before 1955 *
  - * Fantastic Fingerlings now has Ozette and Peanut *
- Organic varieties -
  - * Early Blue * Dark Red Norland *
  - * Kennebec * Kerr's Pink *
- Bintje - heirloom yellow.
- Peanut - flavorful yellow teardrops.
- Blue Mac - late season, lilac-skinned.

Substitutions

Because potatoes are alive and subject to crop limitations, we'll always run out of some varieties before the end of the season. We find that most people prefer getting potatoes to a refund. Unless you indicate on your order sheet that you will not accept subtitutions, we'll follow this protocol:

For commercial varieties -

We will substitute a variety of similar color and season.

For organic varieties -

We will substitute the same variety, grown without synthetic insecticides, fertilizers, herbicides or fungicides, but not *certified* organic.

If that's not available, we'll substitute certified organic stock of a similar variety.

If neither of those is available, we will substitute commercial stock of the same variety and refund the price difference.

If you have specific preferences, please indicate them on your order sheet.

How To Order

All orders must be on one of our 1999 Moose Tubers order forms. An order blank is in the center of the catalog on page 48E. If you need another copy or would like a grid order form, call us and we'll be happy to send it to you.

We've eliminated our small order handling charge. You now pay only shipping charges (see chart below).

Payment with check, money order or credit card must accompany all orders. We request that all orders under $25 pay with a check or MO. Make your check out to Fedco, and send it with the order form(s) to **PO Box 520, Waterville, ME 04903-0520.** We now accept Visa and MasterCard. We will bill your credit card when we receive your order. We will bill or refund you for any adjustments as each order is completed. We do not charge the adjustments to your credit card. If you pay with a credit card, you may **fax** your completed order form to (207) 872-8317. Sorry, **we do not take phone orders.**

Deadlines

Orders received by:	qualify for:
Feb 26	Volume discounts & Best Selection
March 19	Moose Tubers Pickup
April 16	Tree Sale Pickup
May 14	Final Orders for the Season, potato supply limited

Volume Discounts

We reward timely orders over $100 with discounts to encourage you to order as part of a group and to help us determine how much we need to purchase. Figure your discount from your order total before shipping. To qualify for a volume discount we must receive your order by February 26.

Orders over $100 deduct 5%
Orders over $200 deduct 10%
Orders over $400 deduct 15%
Orders over $850 deduct 20%

We have a bulk price list available for amounts over 1200 lbs. Please call or write for one.

Shipping

Potato prices do not include shipping. The shipping weight is the same as the product weight. Look up your zip code in the chart below to figure your shipping cost.

Orders to *Alaska* and *Hawaii* are shipped priority mail. To figure your shipping charges please see chart below.

Delivery options

On your order form please indicate how you want to receive your order. We ship via UPS (or common carrier for large orders) or you may pick up your order at our warehouse in Clinton.

UPS We begin shipping in **mid-April**, in the order received. If you need your potatoes early, please order early! We ship sunchokes separately in early May and sweet potato slips separately in early June.

Common Carrier If your shipment weighs more than 500# call us with the estimated weight and the destination zip code. We will check with trucking companies in Maine and quote you a price based on their rates. In some instances UPS will be cheaper.

PICKUP Our warehouse is easy to find, less than a mile from I-95, exit 37. We send a postcard map and reminder to those planning to come.

Moose Tubers pickup Thursday and Friday, April 8-9, 9am-4:30pm, Saturday, April 10, 9am-noon. We must receive your order by March 19.

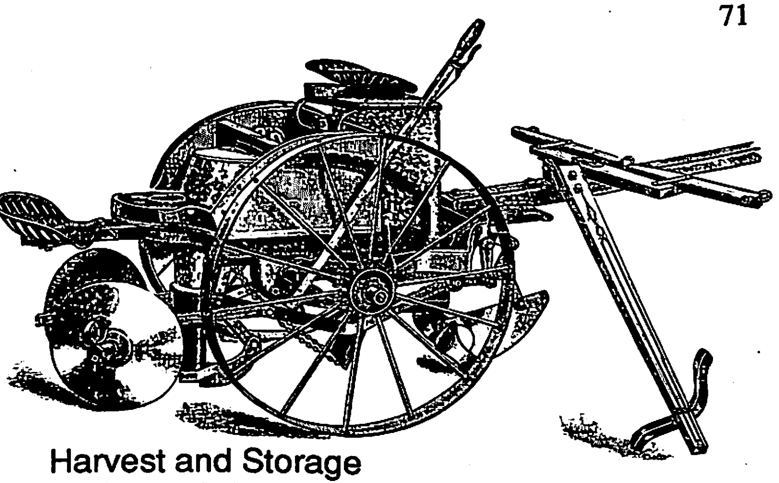
Tree Sale pickup Friday, April 30 through Sunday, May 2, 9am-3:00pm. We must receive your order by April 16.

Parcel Post We do not recommend parcel post for shipping potatoes. It takes too long and the spuds can be damaged by either heat or cold. If UPS can't find your house, please have them delivered to your workplace or a neighbor. Thanks.

We do not ship potatoes to **Canada**, and will not be responsible for providing materials required for importation permits.

If your order weighs ☛ And your zip code begins with	under 2 lbs.	2 to 5 lbs.	up to 10 lbs.	up to 15 lbs.	up to 20 lbs.	up to 25 lbs.	up to 30 lbs.	up to 35 lbs.	up to 40 lbs.	over 40 lbs.	over 250 lbs.	over 500 lbs.
030-059	$3.00	$5.00	$5.50	$5.75	$6.25	$6.90	$7.50	$8.15	$8.65	.23/lb.	.15/lb.	call for a quote 207-873-7333
010-029, 060-069, 119-136	$3.00	$5.25	$5.75	$6.25	$7.00	$8.00	$8.75	$9.65	$10.50	.26/lb.	.19/lb.	
070-089, 100-118, 137-227	$3.00	$5.50	$6.25	$6.75	$7.50	$8.50	$9.50	$10.60	$11.30	.28/lb.	.24/lb.	
228-475	$3.00	$6.00	$6.75	$7.25	$8.40	$10.00	$11.25	$12.50	$13.75	.33/lb.	.29/lb.	
476-574	$3.00	$6.00	$7.25	$8.50	$10.25	$12.25	$14.00	$15.75	$17.35	.43/lb.	.34/lb.	
others except AK and HI	$3.00	$6.00	$9.00	$11.20	$14.00	$16.80	$20.00	$22.50	$25.25	.60/lb.	.44/lb.	
AK and HI	$3.00	$6.00	$14.05	$19.30	$24.55	$29.85	$35.10	$40.35	$45.60	1.14/lb.	▨	

GROWING POTATOES



Upon Arrival

Inspect your order as soon as it comes. If you do not plant within two weeks, store seed in a dark cool (around 40°) fairly humid place. Do not remove growing sprouts; these are your new plants. Warm the seed to 60-70° for two weeks before planting.

Cutting Seed

Small tubers planted whole are less sensitive to seed piece decay than cut pieces. You can cut large tubers into pieces of two ounces or more with at least two eyes. Many varieties have eyes clustered at one end, so be sure to distribute eyes evenly when cutting. Fingerling eyes spiral the length of the tuber so you may cut them into discs or wedges. Letting the tubers skin over (suberize) for a day or two can be valuable in heavy soils, but cutting and planting can be one operation.

Chitting or Green Sprouting

You may use chitting to encourage early growth, speed development of marketable tubers, and perhaps increase yields. Warm tubers to 65° in the dark for about two weeks, then spread them out with most of the eyes facing up in a warm place (60-70°) with medium light intensity for about two weeks. This stimulates strong stubby sprouts at the bud end that are not easily broken off.

Soil Preparation

Potatoes grow in any well-drained fertile soil. Work in compost or aged manure. Using uncomposted manure, lime or wood ash the year of planting will increase the incidence of scab. Turn new ground the year before and plant with a rye/vetch cover crop. Rotate potatoes (and other Solanaceae family members: tomatoes, peppers, and eggplants) with other plant families in at least a 3-year, and preferably a 4-year rotation.

Planting

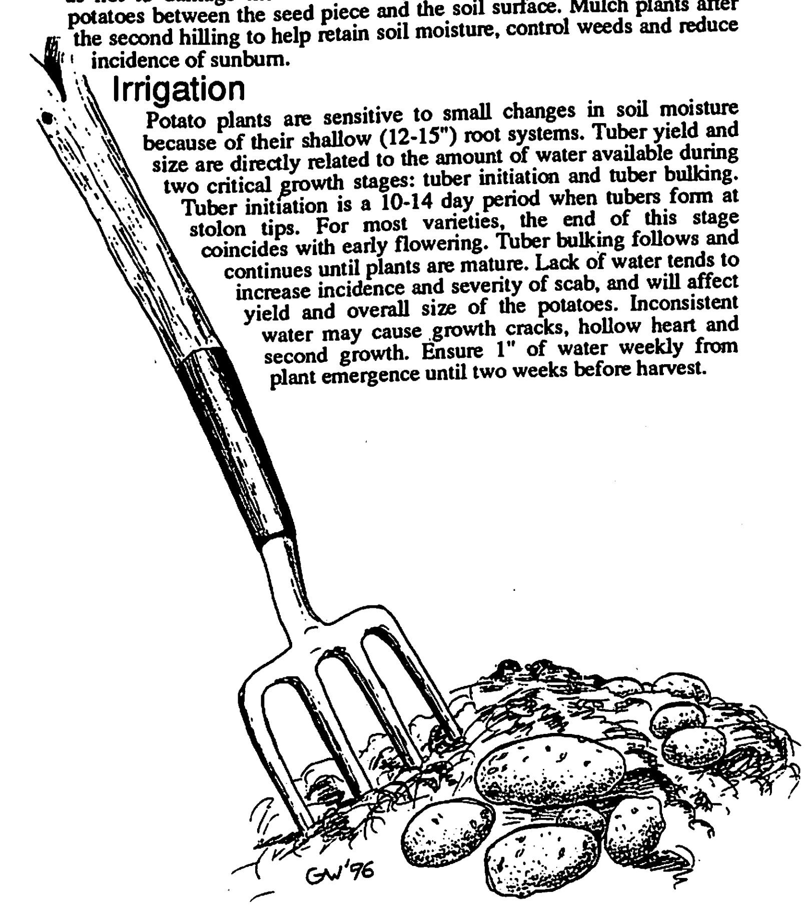
Plant when the soil is dry enough to work easily and has warmed to at least 45°, about when dandelions bloom. Planting in cooler soil slows emergence and increases the chance of seed piece decay. Plant in furrows 4-6" deep, in rows 32-36" apart. Space seed pieces 8-12" apart and cover with 2-4" of soil. One pound of seed will usually plant 5-8 row feet; 20 pounds will usually plant 100 row feet. Using 2 oz. seed pieces 12" apart with 36" row spacing, you will need approximately 1800 lbs. (or 900 lbs. fingerlings) per acre.

Cultivation and Hilling

Cultivate shallowly as needed during early growth. Hill when plants reach 6" and again at 12-15". After the second hilling, plants will shade and outcompete weeds. Don't cover plants completely when hilling. Be gentle so as not to damage the roots. Hilling gives the plants room to develop potatoes between the seed piece and the soil surface. Mulch plants after the second hilling to help retain soil moisture, control weeds and reduce incidence of sunburn.

Irrigation

Potato plants are sensitive to small changes in soil moisture because of their shallow (12-15") root systems. Tuber yield and size are directly related to the amount of water available during two critical growth stages: tuber initiation and tuber bulking. Tuber initiation is a 10-14 day period when tubers form at stolon tips. For most varieties, the end of this stage coincides with early flowering. Tuber bulking follows and continues until plants are mature. Lack of water tends to increase incidence and severity of scab, and will affect yield and overall size of the potatoes. Inconsistent water may cause growth cracks, hollow heart and second growth. Ensure 1" of water weekly from plant emergence until two weeks before harvest.



Harvest and Storage

If vines haven't died back, pull, cut or mow them 10-14 days before harvest to give the skin time to "set," and to prevent transmission of blight spores from foliage to tubers. Harvest in cool dry weather if possible. After digging the spuds, dry them for at least a few hours in the row before gathering. Lightly brush off excess dirt but don't wash potatoes intended for storage. Hold at 55-60° for several weeks to allow harvest injuries and bruising to heal; then store only sound tubers at 38-40° with 85-90% relative humidity in complete darkness.

Yields

An average yield is 10 pounds harvested to 1 pound planted (10:1). Less than 6:1 probably indicates a problem, likely caused by low fertility, lack of water, or excessive disease or insect pressure. Yields as high as 20:1 are exceptional, but can be achieved. Fingerlings have very high yield potential and can surpass 30:1 with good care. Commercial operations in Maine average around 230 hundredweight per acre.

Late Blight

Late blight is caused by the fungus *Phytophthora infestans*, which fortunately survives for only a few days without a living host. Outbreaks are most likely to occur when temps around 60° are accompanied by fog, rain or heavy dew for four to five days.

Dark brown to purple lesions with pale green to yellow margins develop three to five days after infection. Velvety white spores form on the underside of the leaf soon after lesions appear. Spores die rapidly when humidity drops below 95%. Tubers can become infected before or during harvest. Infected tubers show a shallow sunken coppery-brown dry rot moving from the skin toward the center. These lesions frequently become infected by other bacteria and fungi causing a rapid breakdown of the tuber.

Although late blight can be contracted through the seed, the chief cause of infection is from windblown spores spread during damp weather from poorly composted cull piles, volunteer potato plants and neighboring fields of infected potatoes or tomatoes.

Use an appropriate control program if late blight is a threat in your area. MOFGA sometimes recommends a regular prophylactic spray schedule with copper, beginning when the plants are 6" tall and continuing every 7-10 days depending on weather. Please contact Eric Sideman at MOFGA, (207) 622-3118, or your local Cooperative Extension Service, for further information.

ONIONS & SUNCHOKES

7005 Stuttgarter Onion Sets *Allium cepa* We always get excellent flat-bottomed onions which store till June from these top quality Dutch sets. They provide us with a kitchen staple and great onion soups. To produce large bulbs, onions need to be planted as early in spring as the soil can be worked as they are day-length sensitive. Shallow rooted, they require consistent water and freedom from weeds. Side-dress with composted manure and wood ash. In row culture, plant 6" apart in rows 18" apart and mulch when plants are 12-18" tall. In bed culture, plant 5-6" apart in 24-36" wide bed. 1# contains approximately 200 sets and yields 30-40#. Torrential rains, as we go to press, are delaying the Dutch harvest and jeopardizing the crop. We will substitute Oregon-grown Ebeneezer, a rounder yellow storage onion if necessary.
1# $3.00; 3# $8.00; 10# $21.00; 30# $45.00

7010 Dutch Shallots *A. c.* (aggregatum group) Beautiful vigorous plant with its many onion-like leaves growing in a circle around the original set, also called Multiplier Onions. Good as green onions (scallions) for spring and early summer use. For consistently large mature shallots, maintain high fertility and a steady supply of water. Their excellent storage qualities make shallots valuable after the onions are gone. Taste is similar to onions. Different from French shallots, which Fedco Bulbs offers for fall planting. Plant every 6-8" in rows 18" apart. (Approximate weight, for calculating shipping, in parentheses.)
8 shallots (1#) $2.25; 32 (3#) $7.50;
120 (10#) $22.50; 240 (20#) $40.00

7015 Sunchokes *Helianthus tuberosus*
Also known as Jerusalem Artichokes, though neither from Jerusalem nor related to globe artichokes. Sunchokes, wonderfully vigorous perennial tubers, are a delight to dig in the spring. They can be eaten boiled, baked or fresh, and have a unique flavor. Some folks love them and some folks feed them to the pigs, who also love them. Can be used as ornamentals for their 6' annual foliage with yellow daisy-like flowers on top. Plant sunchokes in an area that is easy to control; they will spread and are difficult, if not impossible, to eradicate. Maine-grown without herbicides, pesticides or chemical fertilizers. Shipped separately in early May. Shipping included in the price.
1# $7.00; 3# $16.00; 10# $32.00; 30# $76.00

SWEET POTATOES *Ipomoea batatas*

We are pleased to offer a selection of sweet potatoes chosen from three years of trials specifically for their ability to produce in our northern climate. Tender as melons, they do not tolerate cold. With black plastic mulch and row covers, you can grow a decent yield of these delectable roots in the North. See Sweet Potatoes for the Home Garden (#6692 in the books section) for useful instructions for their culture in the North. Our slips are grown by Alan Schwartz of Canton, MA. We will ship sweet potato slips separately in early June with growing and curing instructions . Shipping is included in the price.

7020 Beauregard red-orange skin, deep orange flesh Recent release well adapted to the North. High yields of very sweet flesh in attractive uniformly shaped roots. Resistant to growth cracks. Early maturity.
10 slips $10.00; 25 slips $16.75; 50 slips $28.00; 100 slips $50.00

7025 Carolina Ruby bright red skin, deep orange flesh A new introduction from North Carolina Research Station. Related to Beauregard, it matures one week earlier. Excellent yields of bright red roots. Resistant to skinning.
10 slips $10.00; 25 slips $16.75; 50 slips $28.00; 100 slips $50.00

7055 Heirloom Collection Be adventurous! We've chosen three varieties that have been selected and saved for their productivity and flavor. **Maryland Gold** has orange skin, orange smooth-tasting flesh. Medium maturity. Slips originally from Seed Savers Exchange. **Lace Leaf** has red skin, orange flesh, roots of above average yield. Decorative plant with ivy shaped leaves. Medium maturity. Also from Seed Savers Exchange. **Ivis White Cream** with white skin and white flesh is originally from Sandhill Heritage Center. Yields aren't as high as from Beauregard but the delectable sweet flavor is worth it.
4 of each variety, 12 slips $12.00

Will Bonsall

A tall man with a healthy flowing beard, Will Bonsall seems larger than life. His words and thoughts flow in torrents, powered by a keen mind and unrestrained enthusiasm. His collection matches his energy, 3-4,000 accessions (he doesn't know exactly how many any more), of which he annually makes 1,500-1,700 available through the Winter Yearbooks of the Seed Savers Exchange. Since 1989 he has been curator for a substantial part of the SSE collection, including potatoes and peas. Probably he is more impressed with his 50-60 parsnip varieties ("more than the USDA") and 50-60 Jerusalem artichokes ("to my knowledge the largest in the world") than his 1,000-plus peas.

When he came to rural Industry, ME (a fitting name for the locus of his work), in 1971, Bonsall's initial focus was self-sufficiency. "We were growing our own food, let's grow our own seeds, too."

He soon became intrigued by the Cowhorn Potato, a northern New England heirloom with a long skinny shape like a cow's horn and purple skin. Orlando Small, a neighbor, gave him a dry horticultural bean (Orlando's) and a white runner bean (Small's Carolina lima).

Through the years he has been a fount of knowledge about regionally adapted varieties, pointing us to Boothby's Blonde cucumber (#1360 in our catalog, Costata Romanesca zucchini (#1456), Lady Godiva pumpkin (#1984) and Sheba barley (#5910), and occasionally growing seed for us as well.

He was giving classes on seed saving when someone told him about Kent Whealy. So he gave Whealy a call. The rest, as they say, is history.

Trying to find species that others have neglected, Bonsall concentrates on so-called "minor crops" like beets, rutabagas, turnips, chicories, radishes and parsnips. Within the last year he has become curator for Favas (140-150 varieties) and Runner Beans (over 200 varieties from all over the world).

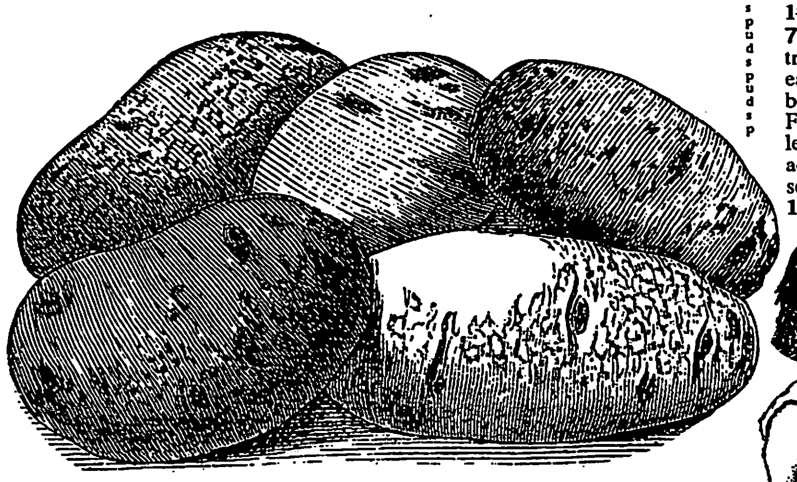
In the days when grassroots organizations and the USDA national germplasm system had almost nothing to do with one another, Bonsall served as a liason, helping them get acquainted. A lot of material has since flowed back and forth.

More recently, Bonsall has turned his attention to global linkages. He has worked with the Nordic Gene Bank in Sweden, with the former East German collection at Gatersleben, with the Scottish Agricultural Science Agency, with Innes and HRI in England, with Australian Temperate Field Crops. In the John Innis collection he located Banner Wheat, an historic hard red spring wheat going back to 1820 that was once one of the most common varieties grown in Maine, and had been long since extinct in the United States. He has put government agencies in touch with non-governmental collectors' groups and vice versa, facilitating exchanges of germplasm.

Bonsall has accomplished all this on a shoestring budget. He dreams of becoming more effective in his work, of getting better funding, maybe an endowment to help put deer control and drought problems behind him. One fantasy is to strike it rich on the monumental futuristic novel on which he has been working the past 10 years. Knowing Will Bonsall, I won't bet against it.

COLLECTIONS

Having trouble deciding which variety to choose? We've put together collections to help. Should any listed variety become unavailable, we reserve the right to substitute.



7060 Speciality Organics Specially grown for you in Maine and all MOFGA-certified organic! Contains All Blue, Cranberry Red, yellow Carola, gorgeous Rose Gold, and Red Cloud. Picture a potato salad with this bunch! 2¹/2# of each variety.
12¹/2# $22.00

7070 Fantastic Fingerlings Introduce yourself to the world of fingerlings. Contains French Fingerling, Kipfel (large with tan skin and yellow flesh), Ozette, Peanut and Rose Finn Apple. Beautiful baked in a spiral lightly dusted with garlic powder, olive oil and dill. 1# of each variety.
5# $16.50

7080 The Classic Starting with early Cobbler (white of unknown origin, great mashed or roasted) and ending with late Green Mountain, this collection of tried and true varieties will reward you with delicious spuds throughout the season. Also contains Chippewa, Kennebec and Red Pontiac. All of these varieties were released before 1955. 2¹/2# of each variety.
12¹/2# $14.00

SEED POTATOES *Solanum tuberosum*

FINGERLINGS

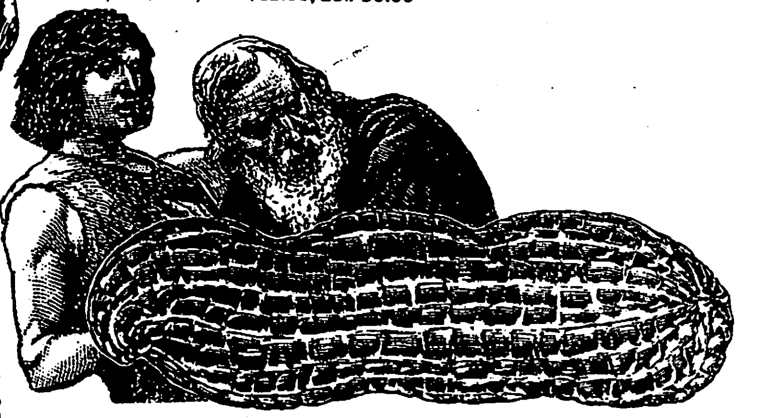
Long and thinner than most potatoes with interesting skin and flesh colors. Fingerlings are very popular with restaurants, fresh markets and home gardeners, too. These beautiful potatoes tend to be quite prolific, late maturing and resistant to scab and rhizoctonia. Their flavor and culinary qualities are exquisite.

7125 Austrian Crescent tan skin, yellow flesh Imagine Gene's surprise to harvest 10 lbs. of golden crescents growing from one plant of last year's forgotten baby spuds! With tan skin and yellow flesh, Austrian Crescent can reach 10" and up to 18 oz. Wonderful as new potatoes, in salads or steamed. Medium-sized plants with mid- to late-season maturity. Colorado certified seed.
1# $3.50; 3# $8.00; 10# $22.00; 25# 50.00

7135 Banana yellow skin, yellow flesh Also known as Russian Banana. Probably the best-known of the fingerlings. Loved for its heavy yields of medium-sized tubers, luscious fingerling flavor and waxy texture. Huge yields (up to 30:1) can be obtained by providing optimum levels of water and nutrients, though average yields are 10:1. Plants are medium-sized and mature midseason. Limited supply of MOFGA-certified organic, Maine certified seed. When we run out, we will substitute Colorado certified seed.
1# $3.50; 3# $8.00; 10# $22.00; 25# 50.00

7145 French Fingerling dark rose red skin, yellow flesh This show-stopper with glistening smooth rose-red skin and rich yellow flesh slightly splashed with pink wowed us all. Creamy taste and firm texture make it one of my favorites any way I use it. French Fingerling produces numerous large tubers and is sure to become important for growers and home gardeners alike. Shows some resistance to potato leafhopper. Tall spreading plant. Limited supply of MOFGA-certified organic, Maine certified seed. When we run out, we will substitute Colorado certified seed.
1# $3.50; 3# $8.00; 10# $22.00; 25# 50.00

7155 Ozette buff skin, white flesh Heirloom of the Makah/Ozette Indian tribe, these bumpy rustic-looking spuds produce exceptionally high yields, easily as much as 20:1. Staffers Gene and Joanna had a hard time choosing between the superb creamy flavor of Ozette and their favorites, Carola and French Fingerling. Large late-maturing vigorous plant has shown good leafhopper resistance. A fine choice for the home gardener and the adventurous market farmer. MOFGA-certified organic, Maine certified seed. **Back!**
1# $3.50; 3# $8.00; 10# $22.00; 25# 50.00



7165 Peanut tan lightly russeted skin, yellow flesh Also known as Swedish Peanut, Almond or Mandel, Peanut is packed with nutty flavor. Great for long-simmering winter stews, as it's so waxy and dense that it stays in nice chunks long after other potatoes have fallen apart. Yellow flesh is surrounded by tan lightly russeted skin. Heavy yields ensure a good supply in your root cellar, where they will keep until spring. Colorado certified seed. New!
1# $3.50; 3# $8.00; 10# $22.00; 25# 50.00

7195 Rose Finn Apple buff skin with rose blush, bright yellow flesh One of my favorite potatoes, with smooth thin skin and firm moist flavorful flesh. David bakes them in a pan with whole garlic cloves, olive oil and kosher salt. Requires your best ground and prefers irrigation, but worth the extra trouble. Best yields are obtained by spacing plants 10-12" apart to avoid connected clusters. Large rose-blushed spuds with clean appearance make Rose Finn a real looker. Popular with growers for market and restaurants. Plants are medium-sized and mature late. MOFGA-certified organic, Maine certified seed. If we run out, we will substitute Colorado certified seed.
1# $3.50; 3# $8.00; 10# $22.00; 25# 50.00

Our Seed Potatoes

All our potatoes meet the certification standards set by the grower's state or province. After passing several field inspections, sample potatoes are grown out in Florida and examined for the presence of viral disease. Only lots where fewer than 5% of the plants show any sign of disease are certified.

Our potatoes come from many sources: well-established commercial growers in Aroostook County, Maine; New Brunswick, Canada; Colorado, and MOFGA-certified organic WoodPrairie Farm, Margeson Farm and LaCourse Family Farm.

Organic Seed Production

The demand for organically grown seed has increased enormously the last few years, but the supply is not keeping pace. We are seeking certified organic growers with access to good storage willing to work with their state's certified seed program.

Colorado Certified Seed

Verlin Rockey of Rockey Farms gows our Colorado certified seed potatoes. Most years he raises both commercial and certified-organic crops. Promoting plant and soil health, he does not use synthetic fertilizers or pesticides and very rarely uses fungicides. This year he used sulfuric acid, which quickly breaks down to sulfur dioxide and water, to kill the foliage before harvesting and could not offer any of his crop for organic certification.

EARLY under 70 days

7205 AC Chaleur buff skin, white flesh Peter Bondeson, an Aroostook County organic farmer, introduced us to this smooth-flavored early variety. Good ratings in a taste test this season convinced me to list Chaleur. High yields of attractive round buff tubers. Excellent for early fresh market. Resistant to common scab, tuber early blight and verticillum wilt. New Brunswick certified seed. New!

2½# $3.00; 5# $6.00; 20# $13.00; 50# $16.00

7210 Caribe purple skin, white flesh I first tried Caribe as a late winter lunchtime treat. Convinced by its crispy skin and nice flavor to try growing it, I was rewarded. Sizing quickly, it produces large tubers with brilliant purple skin and snow white flesh. Medium-dry texture, excellent mashed or baked. Stores well but skin color loses brightness. Medium-sized high-yielding plant. Purplish-blue flowers. Resistant to scab and storage rot. Released by AgCanada in 1984. New Brunswick certified seed.

2½# $3.00; 5# $6.00; 20# $13.00; 50# $16.00

7220 Chieftan red skin, white flesh My mouth waters thinking about this fine-flavored red roasted with onions and rosemary in balsamic vinegar and olive oil. Very good flavor, shallow eyes and nice appearance make Chieftan a popular commercial variety with excellent culinary qualities. Surpassed Norland's marketable yields by 181% in 1990 and 1991 university tests. Medium-sized plant with violet flowers. Resistant to scab, net necrosis, stem end browning and late blight. Maine certified seed.

2½# $3.00; 5# $5.00; 20# $11.00; 50# $14.00

7240 & 7245 Dark Red Norland dark red skin, white flesh A recent selection from Norland for its brighter skin color. Matures slightly later than its parent, with consistently higher yields. Norland has long been the standard early red, delicious for those first tubers of the year. When David and Susan think of eating new potatoes with parsley on a summer night, they think of Norland. Excellent for boiling and good for baking. Medium-to-large plants with purple flowers. Fair storage with medium dormancy.

7240 MOFGA-certified organic, Maine certified seed. New!

2½# $4.50; 5# $8.00; 20# $21.00; 50# $35.00

7245 Maine certified seed.

2½# $3.00; 5# $5.00; 20# $11.00; 50# $14.00

7252 Early Blue blue skin, white flesh with purple streaking Early Blue's beautiful deep blue skin, white eyes and white flesh lightly streaked with purple stood out in our 1997 trials. Medium-sized plants yielded a heavy set of smooth evenly sized tubers. All-purpose potato well suited for steaming, boiling and baking. We are pleased to be able to offer this variety as MOFGA-certified organic, Maine certified seed. Limited supply; order early. New!

2½# $4.50; 5# $8.00; 20# $21.00

7254 Eramosa buff skin, white flesh Throughout our trials this year, Eramosa has shown early high yields of semi-flat oval tubers. Market growers will also appreciate its shallow eyes and nice appearance. Excellent roasted on the grill with onions, peppers and Sun Gold cherry tomatoes. Medium-large plants have deep violet flowers. Moderate resistance to common scab, resistant to rhizoctonia, hollow heart and skinning. Released by AgCanada-Ontario in 1987. New Brunswick certified seed.

2½# $3.00; 5# $6.00; 20# $13.00; 50# $16.00

7260 Frontier Russet light russet skin, white flesh Frontier gives us high yields of oblong tubers, smooth and slightly russeted. Good flavor—texture not as dry as a Burbank—makes this tater excellent for mashing, baking or frying. Home gardeners and market growers alike choose Frontier for its strong disease resistance and long storage. New Brunswick certified seed.

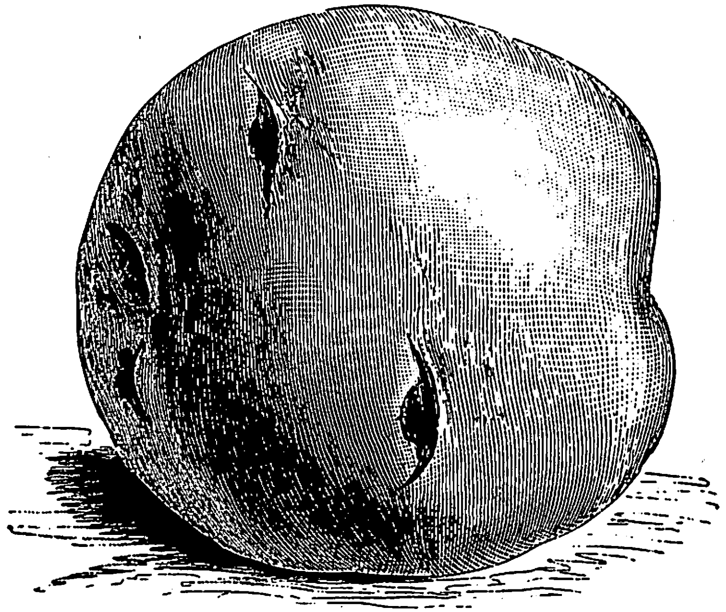
2½# $3.00; 5# $6.00; 20# $13.00; 50# $16.00

7270 Onaway buff skin, white flesh Dependable all-purpose early variety that's been around since 1956. This tells me Onaway has proven attributes which make it worth growing. Staffer George Stewart always grows it for its excellent storage and fine flavor—he sautés it with chicken, broccoli and garlic. Tubers set early and size rapidly. Produces high yields from medium-to-large vigorous plants with pink flowers. Resists late blight as well as scab. Katahdin is one parent. Maine certified seed.

2½# $3.00; 5# $6.00; 20# $13.00; 50# $16.00

7280 Red Gold red skin, yellow flesh Red Gold continues to impress us with its delicious flavor and beautiful appearance. I grow these for that first potato, quickly steamed then tossed with butter, dill and a touch of salt. High yield and earliness make it a top choice for growers. Excels as a new potato for salads and baking. Does not store well. One of our best sellers. Introduced by AgCanada in 1987. New Brunswick certified seed.

2½# $3.00; 5# $6.00; 20# $13.00; 50# $15.00

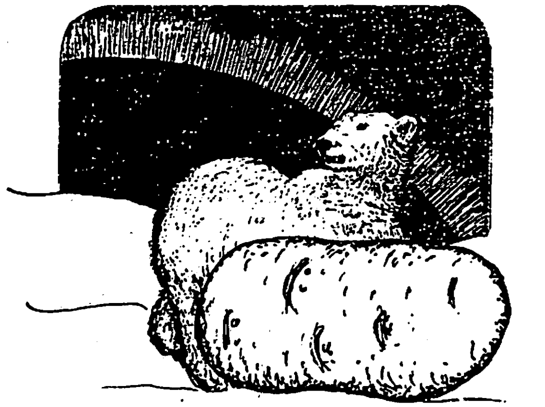


7300 Sangre red skin, white flesh A superb red which sizes quickly for early digging. Skin is smooth, slightly russeted and retains its color. One customer writes, "Sangre is the most beautiful red potato I have grown in 20 years. They were prolific and great to eat. Ate them up first and fast!" Excellent for new potatoes, boiled or baked. Stores very well. Colorado certified seed.

2½# $4.00; 5# $7.00; 20# $18.00; 50# $27.00

7320 Tobique tan skin with pink splashing, white flesh A unique potato with its pink splashes, Tobique is not readily available anywhere else. In our trials it has consistent good yields of large tubers. Its waxy texture and fine flavor add delicious body to corn chowder. Medium-sized plants with reddish-purple flowers resist verticillium wilt, fusarium storage rot and net necrosis. New Brunswick certified seed.

2½# $3.00; 5# $6.00; 20# $13.00; 50# $16.00



7340 Yukon Gold yellow-buff skin, light yellow flesh Yukon Gold has good flavor, good storability, and drier texture than most yellows. Tubers are oval and slightly flattened with small pink eyes that distinguish it from other yellow-fleshed varieties. With excellent name recognition, it is often the only yellow-fleshed variety on supermarket shelves and in gourmet catalogs. Very popular. Be aware that Yukon is known for poor emergence and low yields. Resistant to mild mosaic and leaf roll. Released by AgCanada in 1980. Maine certified seed.

2½# $3.00; 5# $5.00; 20# $11.00; 50# $14.00

Spud Pests

Like most crops, potatoes are affected by various insects and diseases. The Colorado potato beetle and the potato leafhopper are the most damaging insects. Some diseases, such as late blight (see page 71) can also be damaging; others are mostly cosmetic, like common scab. See The Potato Field Manual #6648 and IPM for Potatoes #6612 in the book section for further information or consult your local Cooperative Extension office for help on spud problems.

MID-SEASON 70 - 90 days

7410 & 7415 All Blue dark purple skin, bright purple flesh Add zest and color to your potato meals! Once considered only a novelty, All Blue is now becoming a very popular specialty variety. I always grow a few of these for their really great flavor. Brilliant purple-fleshed spuds and fresh green peas makes a delightful color combo as well as a delicious potato salad. Vigorous plants with blue blossoms have solid yields and store well.

7410 MOFGA-certified organic, Maine certified seed.

2½# $4.50; 5# $8.00; 20# $21.00; 50# $35.00

7415 Maine certified seed.

2½# $3.00; 5# $6.00; 20# $13.00; 50# $20.00

7420 All Red red skin, pinkish-red flesh Also known as Cranberry Red, these spuds are the best red-skinned, red-fleshed variety we've grown. Heavy yields of large smooth tubers have a moist texture best used for roasting and salads. A red, white and blue salad? Why not? Vigorous plant, medium maturity. Colorado certified seed.

2½# $4.00; 5# $7.00; 20# $18.00; 50# $27.00

7440 & 7445 Carola yellow skin, yellow flesh Once known only to small-scale farmers and gardeners, Carola is becoming the "potato lover's potato." A staff favorite (always winning our taste tests!) for its exquisite flavor and moist creamy texture. Introduced in 1979 from Germany, Carola consistently shows high yield, good disease resistance, and long storage. Top quality any way you cook it. Deservedly our best seller. Organic seed grown by Ed and Erich Margeson.

7440 MOFGA-certified organic, Maine certified seed.

2½# $4.50; 5# $8.00; 20# $21.00; 50# $35.00

7445 Maine certified seed.

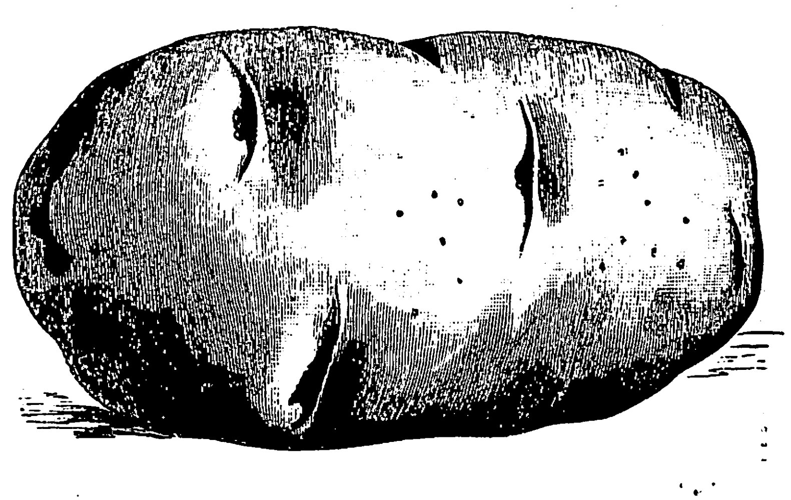
2½# $3.00; 5# $6.00; 20# $13.00; 50# $15.00

7460 Cherry Red red skin, white flesh Vivid-red smooth skin, heavy yields and resistance to blight characterize this excellent all-purpose potato. Delicious mashed with a sweet pepper relish garnish. Primarily for early fresh market with quick sizing. Plant 8" apart to avoid oversized tubers. Maine certified seed.

2½# $3.00; 5# $6.00; 20# $13.00; 50# $16.00

7465 Chippewa cream skin, white flesh Old standard variety, released in 1933. Early sizing of smooth, clean tubers makes Chippewa a regular in our garden. Delicious, creamy taste is ideal for mashed potatoes. Flattened oval tubers have shallow eyes, thin skin and moderate scab resistance. Medium to large spreading plant with light lilac flowers. Maine certfied seed.

2½# $3.00; 5# $5.00; 20# $11.00; 50# $14.00



7490 & 7495 Kennebec buff skin, white flesh For decades Kennebec has been the standard home garden variety. Widely adaptable to varying soil conditions. Produces high yields of large delicious spuds for fresh eating and storage. Great any way you prepare them. Large plant with a dense canopy of white flowers. Resistant to late blight; susceptible to rhizoctonia. Released by USDA and Maine in 1948.

7490 MOFGA-certified organic, Maine certified seed.

2½# $4.50; 5# $8.00; 20# $21.00; 50# $35.00

7495 Maine certified seed.

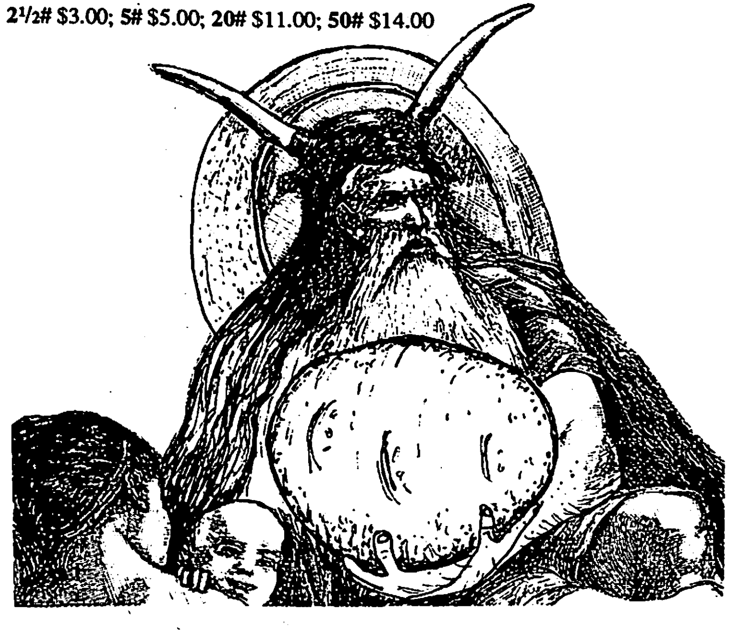
2½# $3.00; 5# $5.00; 20# $11.00; 50# $14.00

7497 Kerr's Pink pink skin, white flesh I have heard this is an old Irish or Scottish heirloom; take your pick. Whatever the heritage, it has been around since the 1800s. A heavy set of small-to-medium tubers with beautiful beige skin overlaid in pink, and darker pink around the eyes. Flesh is creamy white; dry, floury and smooth when steamed. Limited supply; please order early. MOFGA-certified organic, Maine certified seed. New!

Only one size available: 2½# $4.50

7500 Krantz medium russet skin, white flesh Two things come to mind when I think of Krantz—really nice flavor and an exceptional display of white flowers. Its many other strengths include high yield, early tuber sizing, large vigorous plant size and extreme resistance to hollow heart, scab, and late blight. Not as dry or mealy as most russets. Maine certified seed.

2½# $3.00; 5# $5.00; 20# $11.00; 50# $14.00



7520 Purple Viking purple skin with pink splashes, white flesh Looking for Daku's Round Purple? Some consider Purple Viking to be the same variety. Try some of these and you can join the controversy. In our trials they were very similar. Pink-splashed purple skin and snow-white flesh make this potato stand out. Exceptionally crisp skins when baked. Produces a nice crop of lunkers. Compact plant with rounded leaves shows some resistance to hopperburn. Colorado certified seed.

2½# $4.00; 5# $7.00; 20# $18.00; 50# $27.00

7525 Reddale red skin, white flesh We are pleased to be able to offer Reddale again after several years' absence. Prolific producer of uniform large tubers that store well. Because of rapid bulking, this variety has potential for an early market red. Excellent boiled or baked. Highly resistant to scab, verticillium wilt and late blight. Grown by Jim and Megan Gerritsen at WoodPrairie Farm in Bridgewater. MOFGA-certified organic, Maine certified seed.

2½# $5.50; 5# $9.50; 20# $25.00; 50# $50.00

7530 Ruby Red red skin, white flesh Living up to its name, Ruby Red wins the "Jewels of the Earth" award for its stunning red skin and high yields. A prodigious producer of "B" sized potatoes great for steaming and salads. The only red variety we grew not damaged by wire worms. Highly resistant to common scab, verticillium wilt, and late blight though susceptible to bruising. Medium-sized plant. Maine certified seed.

2½# $3.00; 5# $6.00
20# $13.00; 50# $16.00

7540 Russet Norkotah heavy russet skin, white flesh An early fresh-market russet with very attractive appearance and thick skin best used as a baker. Really soaks up the butter! Marketable yields were 22% more than Burbank's in university tests. Stores very well. Susceptible to verticillium wilt but resistant to scab, growth cracks and hollow heart. Released in 1987 by the University of North Dakota, where it is a major seed variety. Maine certified seed.

2½# $3.00; 5# $5.00; 20# $11.00; 50# $14.00

7550 Saginaw Gold yellow skin, yellow flesh I can always count on Saginaw to give a decent yield of nice round golden spuds even in marginal growing years. With a medium-dry texture, it is excellent any way but especially for french fries. Resistant to rhizoctonia and hollow heart. I always have some of these in my root cellar! Limited supply; order early. MOFGA-certified organic, Maine certified seed.

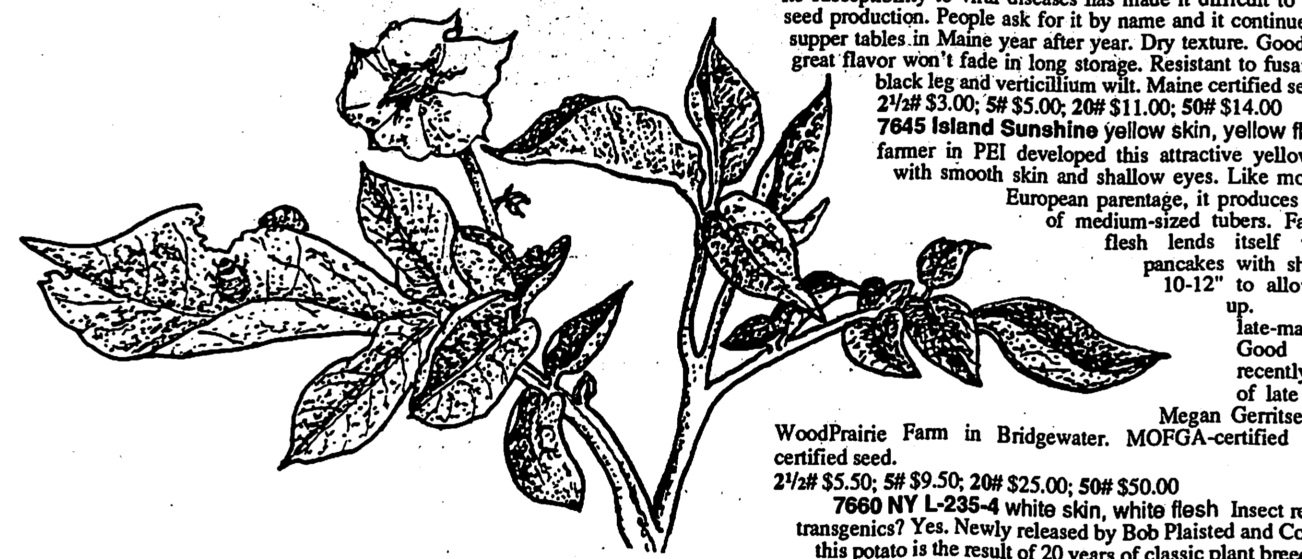
2½# $4.50; 5# $8.00; 20# $21.00

7560 Yellow Finn yellow skin, bright yellow flesh This variety impressed me at the first tasting: superb flavor, buttery yellow flesh and creamy texture. I really like these baked but also imagine them sauteed with onions and garlic. Yellow Finn has long been a standard variety in European specialty markets and is now gaining popularity in the US. Colorado certified seed.

2½# $4.00; 5# $7.00; 20# $18.00; 50# $27.00

LATE more than 90 days

7610 Bintje yellow skin, yellow flesh Another yellow-fleshed potato? Yellows have superb flavor, Bintje included. A heavy set of medium-sized smooth golden tubers gives you plenty for leek, potato and spinach soup. The world's most widely grown yellow variety, released by the Netherlands in 1910. Tubers set high on tall rapidly emerging vigorous plants. Space at 16-18". Colorado certified seed. New!
2½# $4.00; 5# 7.00; 20# $18.00; 50# $27.00



7615 Blossom red skin, dark red flesh What a beautiful name! Blossom is a dazzler with its red skin and solid deep-red flesh. Large tubular tubers are excellent mashed or baked. High-yielding medium-sized spreading plant. Colorado certified seed.
2½# $4.00; 5# 7.00; 20# $18.00; 50# $27.00

7617 Blue Mac lilac-blue skin, white flesh As I dug tubers for supper, I unearthed a mound of these lilac-skinned beauties from one plant. Dry but delicious, best used for mashing, baking or frying. Round tubers have lightly netted skin, shallow eyes and white flesh. Sets heavily so is best spaced at 14-16". Vigorous upright plants are moderately resistant to late blight. New Brunswick certified seed. New!
2½# $3.00; 5# $6.00; 20# $13.00; 50# $16.00

7619 Castile buff skin, white flesh Each season I grow Castile, I like it more. High yields of large tubers come out of the ground clean and smooth regardless of growing conditions. Excellent for fluffy baked spuds or crispy french fries. Resistant to hollow heart, fusarium and golden nematode. New York certified seed.
2½# $3.00; 5# $6.00; 20# $13.00; 50# $16.00

7620 Elba buff skin, white flesh A late-maturing variety with high yields of large smooth tubers having moist flavorful flesh. Market grower Marybeth Fuchs described Elba as "the best boiled potato that I have ever eaten." Has shown good resistance to leafhoppers even renewing growth after they leave. Hill well as Elba sets high. Great for storage. Excellent resistance to late blight. Resistant to early blight, verticillum wilt and golden nematode. Maine certified seed.
2½# $3.00; 5# $5.00; 20# $11.00; 50# $14.00

If you would like a variety we don't list, we may be able to get it for you in 50 lb. quantities. Please ask.

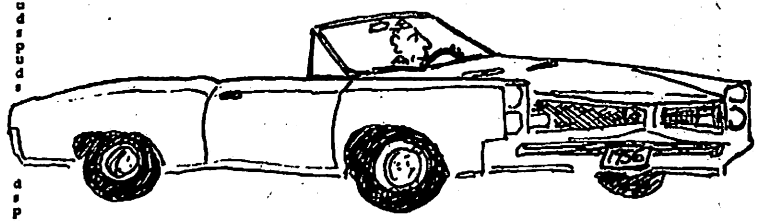
7630 German Butterball yellow skin, yellow flesh A truly golden heirloom that's been passed down for generations; so good that it found its way into certified seed production. Deep yellow flesh with a dry mealy texture is just right for the best scalloped potatoes. Good yields of smooth, lightly russeted tubers have earned Butterball a place in my garden. Susceptibilities or resistances for these old varieties are not known. Observations and comments are welcome. Colorado certified seed.
2½# $4.00; 5# 7.00; 20# $18.00; 50# $27.00

7640 Green Mountain buff skin, white flesh We are fortunate to have this heirloom from 1885 known for excellent baking qualities still available. Its susceptibility to viral diseases has made it difficult to keep in certified seed production. People ask for it by name and it continues to grace many supper tables in Maine year after year. Dry texture. Good appearance and great flavor won't fade in long storage. Resistant to fusarium storage rot, black leg and verticillium wilt. Maine certified seed.
2½# $3.00; 5# $5.00; 20# $11.00; 50# $14.00

7645 Island Sunshine yellow skin, yellow flesh An organic farmer in PEI developed this attractive yellow-fleshed potato with smooth skin and shallow eyes. Like most potatoes with European parentage, it produces an abundant set of medium-sized tubers. Fairly dry golden flesh lends itself well to potato pancakes with shallots. Space at 10-12" to allow them to size up. Medium-sized late-maturing plants. Good tolerance to recently evolved strains of late blight. Jim and Megan Gerritsen grew these at WoodPrairie Farm in Bridgewater. MOFGA-certified organic, Maine certified seed.
2½# $5.50; 5# $9.50; 20# $25.00; 50# $50.00

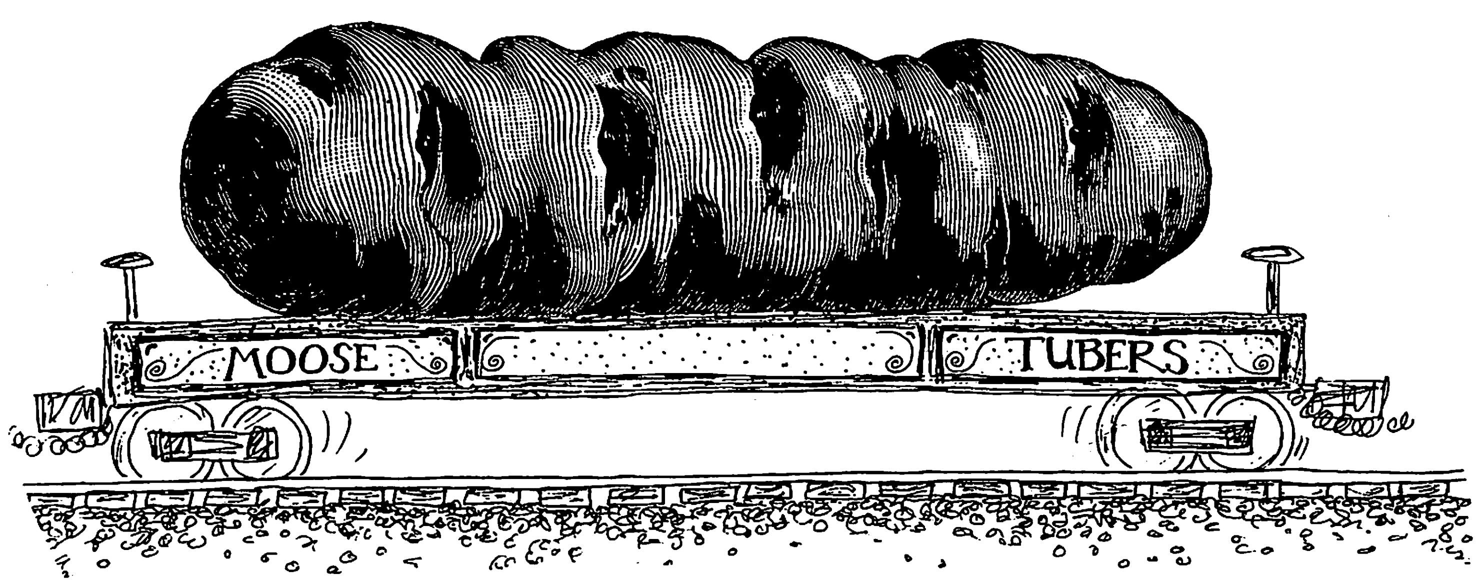
7660 NY L-235-4 white skin, white flesh Insect resistance without transgenics? Yes. Newly released by Bob Plaisted and Cornell University, this potato is the result of 20 years of classic plant breeding crossing the standard *S. tuberosum* with *S. berthautii* from the wild in Bolivia. L-235-4 has glandular trichomes or sticky hairs that resist insects, particularly flea beetles and leafhoppers and to some extent Colorado potato beetles. In 1997, the year of the leafhopper plague, these plants had virtually no insect damage. It is good to know, in these times of transgenic foods, that there are still classically bred cultivars coming onto the market. Because of an article in *Organic Gardening* last year we had more demand than supply. We contracted for a much larger crop, but still recommend ordering early. Produces high yields of mostly large potatoes. Best for mashing or baking. Resistant to golden nematode and PVX. Moderately resistant to late blight. Maine and New York certified seed.
2½# $3.00; 5# $6.00; 20# $13.00; 50# $18.00

7665 Red Cloud red skin, white flesh Red Cloud is popular for heavy yields of large, intensely red tubers. Snow white flesh a little on the dry side makes delicious fluffy baked potatoes. Retains bright skin color during long storage so you may want to grow some just for winter eating. Highly resistant to scab, resists early blight and hollow heart, tolerates heat stress. Medium-sized spreading plant with dark violet flowers. Maine certified seed.
2½# $3.00; 5# $5.00; 20# $11.00; 50# $14.00



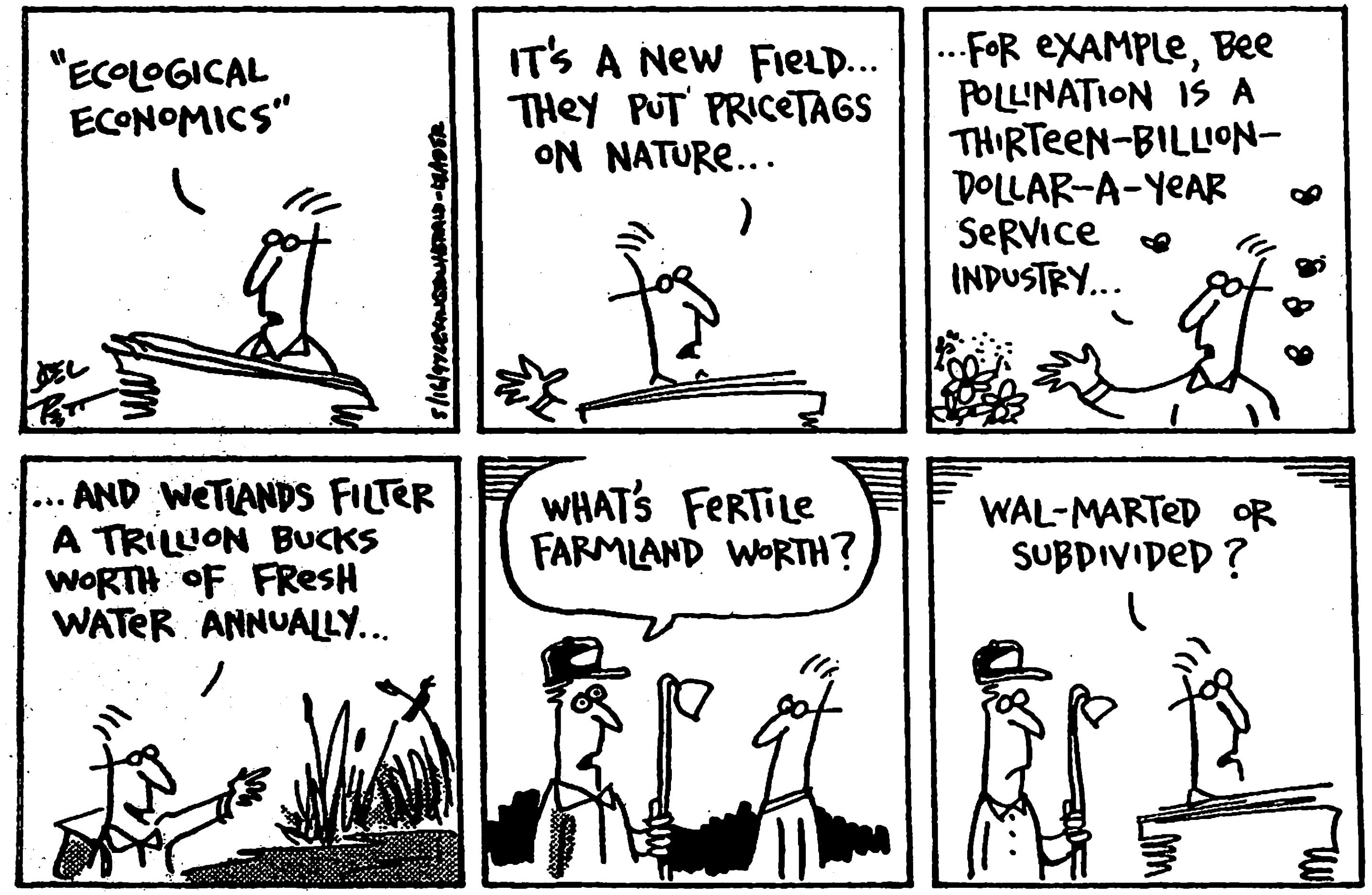
7690 Red Pontiac red skin, white flesh An old standard with many dedicated fans. Our favorite for mashed potatoes, with distinctive flavor that brings me back for more. Also great for winter soups and usually part of my root cellar repertoire. Large plants with good drought tolerance produce high yields of large tubers. Medium-deep eyes. Unless you're raising fodder for your spud cannon, plant closely to avoid oversized tubers, which can become knobby with second growth. Known as Dakota Chief for many years. Maine certified seed.
2½# $3.00; 5# $5.00; 20# $11.00; 50# $14.00

7710 W-1005-R heavy russet skin, white flesh A late russet to replace Russet Burbank? Potato breeders have been trying for a long time and this one comes close. Trialer Barry Hayes of Haycroft found this variety produces consistently fine tubers with thick netted skin. Dry, mealy flesh is great for baking and frying. Excellent storage. Matured fine for us here in Central Maine. Requires 14-16" spacing and fertile ground to size up. Prefers irrigation. Medium upright plant. Maine certified seed.
2½# $3.00; 5# $5.00; 20# $11.00; 50# $14.00



Potatoes at a Glance

Variety	Maturity E=early M=midseason L=late	Skin Color	Flesh W=white	Shape R=round Ob=oblong F=oval-flattened	Texture	Yield L=low M=medium H=high	Storage	Scab Resistance
Austrian Crescent	M-L	tan	yellow	long	waxy	M	good	high
Banana	M-L	yellow	yellow	long	waxy	M	good	high
French Fingerling	M-L	dark rose red	yellow dappled red	long	waxy	H	good	high
Ozette	L	buff	W	long	waxy	H	good	high
Peanut	L	netted tan	yellow	teardrop	waxy	M-H	good	high
Rose Finn Apple	M-L	rose blushed beige	bright yellow	long	waxy	M	good	high
AC Chaleur	E	buff	W	R	waxy	H	good	good
Caribe	VE	purple	W	Ob	waxy	H	good	good
Chieftan	E	bright red	W	R	moist, firm	H	fair	high
Dark Red Norland	E	dark red	W	Ob	moist, firm	H	fair	high
Early Blue OG	E	blue w/ white eyes	white w/ purple	Ob	moist, firm	M-H	good	good
Eramosa	VE	buff	W	F	waxy	H	fair	good
Frontier Russet	E	light russet	W	Ob	dry, mealy	H	excellent	good
Onaway	E	buff	W	R	moist	M-H	excellent	high
Red Gold	E	red	yellow	R	waxy	H	short	moderate
Sangre	E	deep red	W	Ob	moist, firm	M-H	excellent	good
Tobique	E	tan w/ pink eyes	W	Ob	waxy	H	good	high
Yukon Gold	E	yellow-buff	light yellow	oval	dry, mealy	L	excellent	moderate
All Blue	M	dark purple	bright purple	Ob	moist, firm	M-H	excellent	moderate
All Red	M	red	pinkish-red	R	moist	M	good	good
Carola	M	yellow	yellow	Ob	moist, firm	H	good	high
Cherry Red	M	red	W	R	moist	H	good	high
Chippewa	M-E	cream	W	F	moist, firm	M-H	good	moderate
Kennebec	M	buff	W	Ob	moist, firm	H	excellent	moderate
Kerr's Pink	M	pink	W	F	floury	M-H	short	good
Krantz	M	medium russet	W	Ob	dry, mealy	M-H	short	high
Purple Viking	M	purple w/ pink splashes	W	R	waxy	H	excellent	high
Red Dale	M	bright red	W	R	moist	H	good	high
Ruby Red	M-L	dark red	W	R	moist, firm	M-H	good	high
Russet Norkotah	M-E	heavy russet	W	long	dry, mealy	H	good	high
Saginaw Gold OG	M-L	yellow	yellow	R	waxy	H	excellent	good
Yellow Finn	M	yellow	bright yellow	F	waxy	M-H	excellent	good
Bintje	L	yellow	yellow	Ob	waxy	H	fair	moderate
Blossom	L	red	dark red	long	waxy	M	good	moderate
Blue Mac	L	lilac-blue	W	R	dry, mealy	H	good	moderate
Castile	L	buff	W	Ob	waxy	H	good	good
Elba	L	buff	W	R	waxy	H	excellent	high
German Butterball	L	yellow	yellow	Ob	dry, mealy	H	excellent	good
Green Mountain	L	netted buff	W	Ob	dry, mealy	H	excellent	moderate
Island Sunshine	L	yellow	yellow	R	dry, mealy	M	good	good
NYL-235-4	L	buff	W	R	dry, mealy	H	excellent	moderate
Red Cloud	L	dark red	W	R	dry, mealy	H	excellent	good
Red Pontiac	L	dark red	W	R	moist	H	excellent	moderate
W-1005-R	L	heavy russet	W	long	dry, mealy	H	excellent	good


"ECOLOGICAL ECONOMICS"
IT'S A NEW FIELD... THEY PUT PRICETAGS ON NATURE...
...FOR EXAMPLE, BEE POLLINATION IS A THIRTEEN-BILLION-DOLLAR-A-YEAR SERVICE INDUSTRY...
...AND WETLANDS FILTER A TRILLION BUCKS WORTH OF FRESH WATER ANNUALLY...
WHAT'S FERTILE FARMLAND WORTH?
WAL-MARTED OR SUBDIVIDED?

Organic Growers Supply

Last year I said in this space that I hoped the third time would be the charm, and it was. We had a successful season and quite an increase in the volume of goods brought into and sent out of our warehouse. Working in the warehouse in April was a challenge. We have outgrown the space and had to move pallets of potatoes and soil amendments around like pieces of a giant sliding number square puzzle. Fortunately we made the right moves and kept things rolling.

Knowing that Moose Tubers & Organic Growers Supply no longer fit in the rented warehouse, the cooperative is planning to build a 12,500 sq. ft. warehouse next to the seed warehouse on the Upper Bellsqueeze Road in Clinton to be ready for the fall of 1999. This will double our space, give us room to grow and have the added benefit of combining all Fedco's warehouse operations on one site. We're pretty excited.

Searching for a theme for this year's catalog cover, I thought of Susan's remark that bovine growth hormone has done more for the organic dairy market than any amount of advertising. Natural food stores here in Central Maine now carry organic milk from at least three local dairies, as well as milk from the Organic Cow and Organic Valley. Several local farms have found an outlet for their milk and are making the transition to organic dairy farming.

Because forage grasses and rotational grazing are such important parts of this resurgence, I naturally turned to grass and of course Walt Whitman, our greatest celebrant of the earth's beauty, endurance and fecundity. Even in the depths of winter, we can, in our imaginations, sit back with him and lean and loaf at our ease and contemplate a spear of summer grass.

David Shipman, OGS coordinator

We work closely with MOFGA to ensure that our products are acceptable. Since 1988 Fedco Seeds has been cooperating with MOFGA to offer the supplies that organic growers need. All our products are approved for organic certification.

Moose Tubers & OGS People

Moose Tubers Coordinators: Alison LaCourse, Paul LaCourse
OGS Coordinators: David Shipman, Susan Kiralis
Warehouse Crew: Carol Doyle, Ed Hamel, Yvonne Montpelier, Jarrod Pooler

New in Organic Growers Supply

- *No deadlines for discounts*
- *New forage grasses*
- *Menafee Humates*
- *Dustin-Mizer*
- *Weeding Knife*
- *Saylor's Caps, for increased and earlier tomato yields.*
- *Elmer's Plantex-C, biodegradeable cotton row cover, for the benefits of woven plastic without the environmental costs.*
- *Soil Sieve/Seed Screens*
- *Bushel Baskets*

We can't carry every product folks would like to see; there just isn't enough time and space. But we are always interested in examining new products. If there is a product you think we should offer, let us know about it. If there is something you would like us to find for you, let us know that too. If you need other cover crops, we can usually order them for you in 50 lb. lots.

Many of our rock powders are available in 2000 lb. bags and full or partial truckloads. We bring in several truckloads a year and would be happy to arrange a load or partial load for you. Call David at 873-7333.

Additional Savings

- With our commitment to cooperation, we offer savings on large orders, volume purchases and pickups. We encourage you to take advantage of our discounts by joining or forming an ordering group with friends and neighbors. If you would like to put together a group order, but haven't the time or place to organize it, we will be glad to collate it and pack the orders separately in return for 7% of your order total. For pickup orders, a $100 order total is sufficient; for shipped orders, the total must be at least $250.
- *Savings on multiple bags* of soil amendments. Lower prices for purchases of 10 or more bags of one amendment. Even lower prices on pallet quantities. With our volume and pickup discounts, bulk buyers will realize substantial savings. Prices are FOB Clinton.

How to Order Supplies

All orders must be on one of our 1999 Organic Growers Supply order forms. An order blank is in the center of the catalog on page 48G. If you need another copy or would like a grid order form, call us and we'll be happy to send it to you.

We have no minimum order size and welcome orders from individuals as well as groups. To encourage you to participate in a group order we give discounts (see below). Sorry, you cannot combine orders for different divisions to figure discounts.

Payment with check, money order or credit card must accompany all orders. We request that all orders under $25 pay with a check or MO. Make your check out to Fedco, and send it with the order form(s) to **PO Box 520, Waterville, ME 04903-0520.** We accept Visa and MasterCard. We will bill your credit card when we receive your order. We will bill or refund you for any adjustments as each order is completed. We do not charge the adjustments to your credit card. If you pay with a credit card, you may **fax** your completed order form to (207) 872-8317. **Sorry, we do not take phone orders.**

Sales tax: Maine residents only! Items #9000-9999 are taxable. No tax on any other items. No tax for out-of-state residents. Maine farmers: Please send us your state resale number.

Deadlines

Orders received by:	qualify for:
Jan. 15	Early Pickup
Feb. 12	March Pickup
March 19	Moose Tubers Pickup
April 16	Tree Sale Pickup

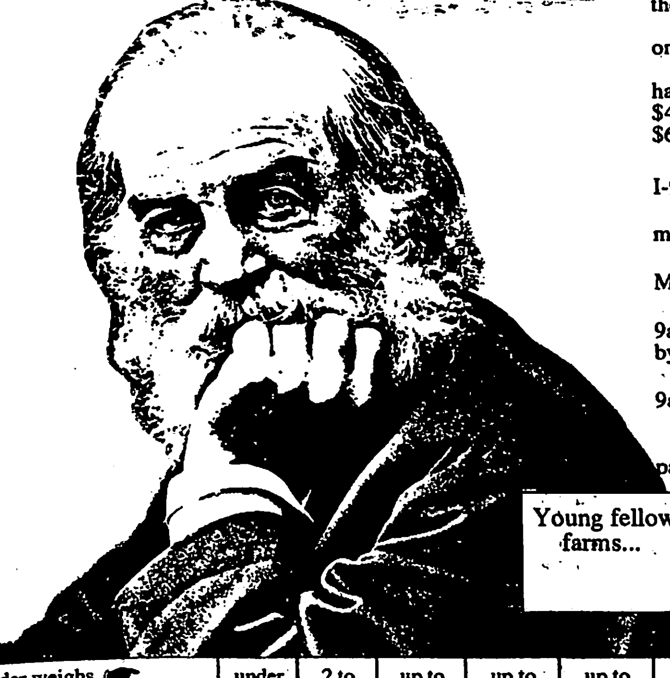
There is no final order deadline for OGS. After the Tree Sale, the OGS warehouse will be open Wednesdays from 3-6 pm for pickups and walk-in customers.

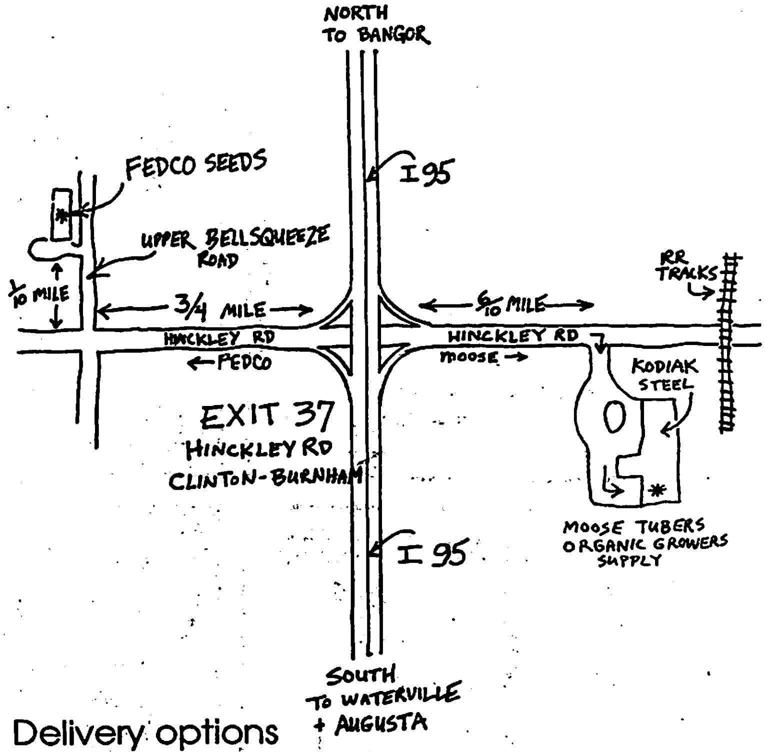
Discounts

All discounts are figured on your total **before** adding shipping charges.

Volume discounts: We offer discounts on large orders to encourage cooperation.

Orders over $100 deduct 5%
Orders over $250 deduct 10%
Orders over $800 deduct 15%
Orders over $1500 deduct 20%
Orders over $3000 call for a quote





Delivery options

Please indicate on your order form how you want to receive your order. We ship via UPS or USPS Priority Mail (common carrier for large orders) or you can pick up your order.

UPS and Priority Mail We begin shipping on Jan. 13. We ship orders in the order we receive them. Orders received before Jan. 13 will be shipped that week. Generally we will ship your order within one week; however, we will not ship orders received after March 20 before April 13.

How to Use the Shipping Chart

- Find your zip code on the table below and read across to the column for the weight of your order to find your shipping cost.
- If your order weighs more than 40 pounds, multiply the weight of your order by the per-pound shipping price. There is a minimum charge of $3.00.
- Delivery by **common carrier** is very reasonable in New England. We have a flat rate price for pallets weighing up to 2000 lbs. In Maine the price is $45.00, in Vermont and New Hampshire, $60.00; and in Massachusetts, $65.00. Delivery in other states is available as well, please call for a quote.

Pickup Our warehouse is in Clinton, easy to find, less than a mile from I-95 exit 37. We send a postcard map and reminder to those planning to come.

Early Pickup Thursday and Friday, January 28-29, 9am-4:30pm. We must receive your order by January 15.

March Pickup Wednesday-Friday, March 3-5, and Monday-Friday, March 8-12, from 9am-4:30pm. We must receive your order by February 12.

Moose Tubers Pickup Thursday and Friday, April 8-9 from 9am-4:30pm, and Saturday, April 10, 9am-noon. We must receive your order by March 19.

Tree Sale Pickup Friday, Saturday and Sunday, April 30-May 2, from 9am-3:00pm. We must receive your order by April 16.

Other We do not recommend shipping by parcel post. If you desire a parcel post delivery, figure shipping charges the same as for UPS delivery.

> Young fellows working on farms and old fellows working on
> farms...
>
> *A Song for Occupations*
> Leaves of Grass, 1855

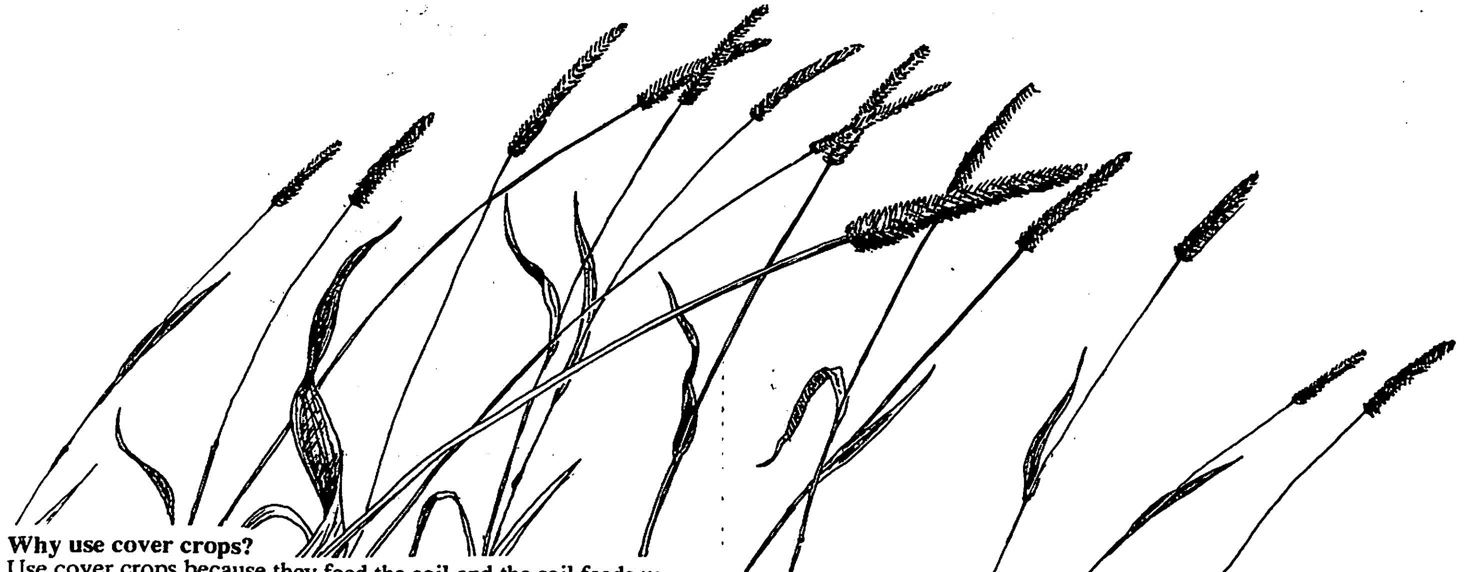
If your order weighs ☛ And your zip code begins with	under 2 lbs.	2 to 5 lbs.	up to 10 lbs.	up to 15 lbs.	up to 20 lbs.	up to 25 lbs.	up to 30 lbs.	up to 35 lbs.	up to 40 lbs.	over 40 lbs.	over 250 lbs.	over 500 lbs.
030-059	$3.00	$5.00	$5.50	$5.75	$6.25	$6.90	$7.50	$8.15	$8.65	.23/lb.	.15/lb.	call for a quote 207-873-7333
010-029, 060-069, 119-136	$3.00	$5.25	$5.75	$6.25	$7.00	$8.00	$8.75	$9.65	$10.50	.26/lb.	.19/lb.	
070-089, 100-118, 137-227	$3.00	$5.50	$6.25	$6.75	$7.50	$8.50	$9.50	$10.60	$11.30	.28/lb.	.24/lb.	
228-475	$3.00	$6.00	$6.75	$7.25	$8.40	$10.00	$11.25	$12.50	$13.75	.33/lb.	.29/lb.	
476-574	$3.00	$6.00	$7.25	$8.50	$10.25	$12.25	$14.00	$15.75	$17.35	.43/lb.	.34/lb.	
others except AK and HI	$3.00	$6.00	$9.00	$11.20	$14.00	$16.80	$20.00	$22.50	$25.25	.60/lb.	.44/lb.	
AK and HI	$3.00	$6.00	$14.05	$19.30	$24.55	$29.85	$35.10	$40.35	$45.60	1.14/lb.	▨	

Cover Crops at a Glance

			Seeding Rate[1]			Organic Matter
Cat #	**Description**	**Planting Time[2]**	**#/1000ft^2**	**#/acre**	**Best Uses**	**produced/acre**
	Grasses and Grains					
8001-4	Kentucky Bluegrass	LSp or LS	1½-2#	45-65#	lawn and pasture	
8006-9	Smooth Brome	Sp or S	¼-¾#	30#	hay, pasture grass	2500-4000#
8011-4	Red Fescue	LS	2-3#	100-130#	lawn and pasture	
8016-9	Tall Fescue	ESp or S	½#	12-14	conservation	
8021-3	Orchard Grass	ESp, LS or W	½#	10-14#	pasture, hay	2,000-5000#
8031-3	Reed Canary Grass	ESp or S	¼-½#	8-10#	pasture, conservation	
8041-4	Annual Ryegrass	ESp	½-2#	14-35#	weed suppression, trap crop	3,300-4,000#
8046-9	Perennial Ryegrass	ES	½-2#	14-35#	weed suppression, trap crop	3,300-4,000#
8051-3	CR Lawn Mix	Sp or F	4#	140#	lawn	
8056-8	Sorghum/Sudangrass	ES	1-2#	10-36#	weed suppression, trap crop, green manure, forage	4,000-5,000#
8061-3	Timothy	Sp or F	½#	12-15#	hay, pasture grass	4400#
8101-3	Barley	Sp	3#	60-90#	hay, weed suppression, grain	8,800#
8111-3	Japanese Buckwheat	Sp or S	2-3#	35-134#	weed suppression, trap crop for phosphorus and calcium	
8121-3	Japanese Millet	Sp	¾#	30#	weed suppression, green manure	
8131-3	Oats	ESp or F	3-4#	110#	nurse crop, weed suppression, green manure, grain	6,000-8,000# spring 2,000-4,000# fall
8141-3	OG Pennuda Oats	ESp	2-3#		grain	
8151-3	Winter Rye	F	3-4#	60-200#	weed suppression, trap crop, grain	3,000-4,000#
	Legumes & Clovers					
8201-4	Alfalfa	Sp or F	½#	15-20#	hay, pasture, nitrogen, green manure	2,000-4,000#
8211-3	Bell Bean	ESp	2-4#	80-170#	nitrogen, green manure, soil conditioner, hay, vegetable, bee forage	1,800-7,200#
8216-8	Birdsfoot Trefoil	Sp, S or EF	½#	12-18#	nitrogen, hay, pasture	5,000#
8221-3	Field Pea	ESp	4#	100-220#	nitrogen, green manure, weed suppression, forage	5,100#
8231-3	Madison Hairy Vetch	F	1#	20-40#	nitrogen, green manure, soil conditioner	3,000-4,000#
8251-3	Soil-Building Mix	ESp	5#	212#	soil conditioner, green manure	8,000#
8261-3	Vetch/Rye Mix	F	2#	90#	nitrogen, green manure	3,000-4,000#
8301-4	Crimson Clover	Sp	¼-2#	9-40#	nitrogen, weed suppression, green manure	2,500-3,000#
8311-4	Mammoth Red Clover	Sp, F or W	½#	7-18#	nitrogen, hay, pasture, green manure	4,500#
8321-4	Annual White Clover	Sp	½-¾#	15-30#	soil conditioner, nitrogen, green manure	1,000-5,000#
8331-4	Dutch White Clover	Sp or F	¼#	6-14#	lawn, undersown, nitrogen, green manure	little
8341-4	NZ White Clover	Sp or F	¼#	6-14#	nitrogen, undersown, green manure	little
8351-4	Yellow Sweet Clover	Sp	1#	9-20#	nitrogen, green manure, bee forage	7,500#

[1] Seeding rates vary depending on use and method of seeding.

[2] Sp=Spring; ESp=Early spring; LSp=late spring; S=summer; ES=early summer; LS=late summer; F=fall; W=frost seeding in winter.



Why use cover crops?

Use cover crops because they feed the soil and the soil feeds us.

Agriculture is a creative imbalance in nature, a region of excess organization begun and maintained by adding energy to a place. We can add energy in several ways. We can pump oil out of the ground and pour it on the soil in its guises as herbicides, pesticides and chemical fertilizers until the soil becomes dead dirt, a method that requires ever-increasing additions of energy for ever-decreasing returns. Killing the soil instead of feeding it. Or we can try for a sustainable addition of energy, soil amendments, organic fertilizers and cover crops to provide nourishment to the soils which nourish the plants which nourish us.

Cover crops take up and store needed elements for the crops which follow them, keep weeds down, host beneficial insects, improve the structure and arability of the soil, break up clay and hardpan. Most of all, as they die back and are turned into the soil, they provide food and energy for the real farmers, the organisms that live and thrive in a healthy soil feeding and caring for the plants. Use cover crops to create a system which can keep itself going, absorbing energy from the sun, taking up energy released by dying microorganisms, releasing it in the fullness of time to new generations of crops and microorganisms. Build a sustainable agriculture guided by intelligence and care and started from seed.

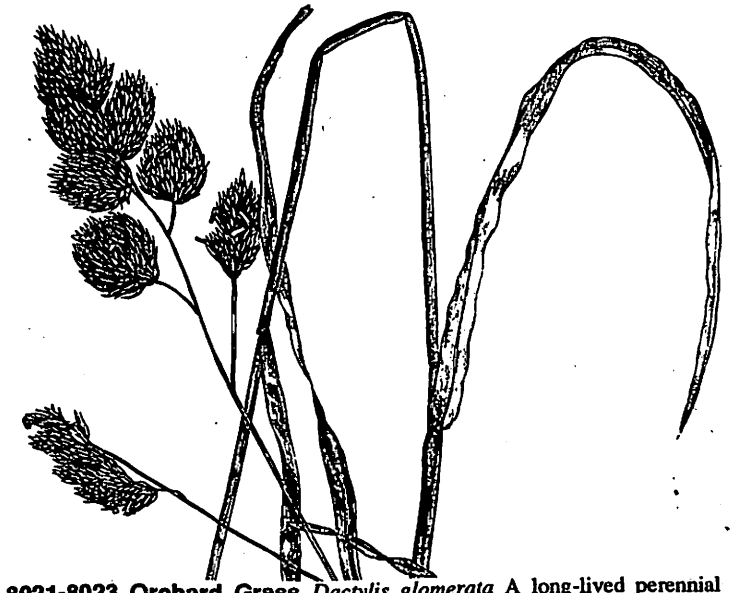
Grasses and Grains

8001-8004 Kentucky Bluegrass *Poa pratensis* The classic lawn grass and an excellent pasture grass. Resistant to cold, its growth slows in summer heat but will continue well into the fall. Sow spring or in fall with red fescue and white clover for lawns, or with timothy and red clover for pastures. Seed at 45-65#/acre for lawns, 1½-2#/1000 sq ft.
8001 2# $5.00; **8002** 5# $10.00; **8003** 25# $42.50; **8004** 50# $71.00

8006-8009 Smooth Brome *Bromus inermis* We tried to discontinue brome last year, but its sales and its importance as a pasture and forage grass forced us to reconsider. Brome is a good choice in an alfalfa mixture for fields pastured and infrequently cut. Alison and Paul say that old-timers up north swear by this deep-rooted sod-forming perennial grass. Also used for hay, erosion control, cover and soil-building. For pasture, sow 4-6# of brome with 6-10# alfalfa per acre in summer. Seed at 15#/acre.
8006 2½# $7.25; **8007** 5# $12.00 ; **8008** 25# $52.00 ; **8009** 50# $92.00

8011-8014 Creeping Red Fescue *Fescue rubra* Excellent grass for lawns and orchards, tolerates shade, but not soggy conditions. Good for steep locations and choking out weeds. Plant in fall to avoid weed pressure. Seed at 100-130#/acre, 2-3#/1000 sq ft.
8011 2# $3.75; **8012** 5# $8.00; **8013** 25# $35.00; **8014** 50# $65.00

8016-8019 Tall Fescue *Festuca arundinacea* Tall 3½-4' plants with numerous leaves and few seed stalks. Old stands form a thick sod with roots penetrating as deep as 5' in well-watered soils. Particularly well suited for conservation purposes; its qualities as a dairy feed are as yet insufficiently tested. Good regrowth after cutting. Seeding rates vary widely depending on method of seeding and intended uses. Seed in mid-fall or early spring at 10-25#/ acre. NEW!
8016 2# $5.00 ; **8017** 10# $20.00 ; **8018** 25# $47.50 ; **8019** 50# $92.00



8021-8023 Orchard Grass *Dactylis glomerata* A long-lived perennial which grows in large clumps or tussocks. It is a vigorous grass, producing more summer regrowth than timothy or bromegrass and tolerating moderately drained soils. It can be established in spring, summer or by frost-seeding in late winter. Tall leafy plants grow rapidly even in poor soils. Its tendency to form coarse bunches can be overcome by grazing and by sowing orchard grass with red clover or alfalfa. We offer the Pennlate variety. Seed at 10#/acre or 4-6 # with 8-12# of alfalfa or red clover/acre. NEW!
8021 2# $5.00 ; **8022** 10# $20.00 ; **8023** 50# $80.00

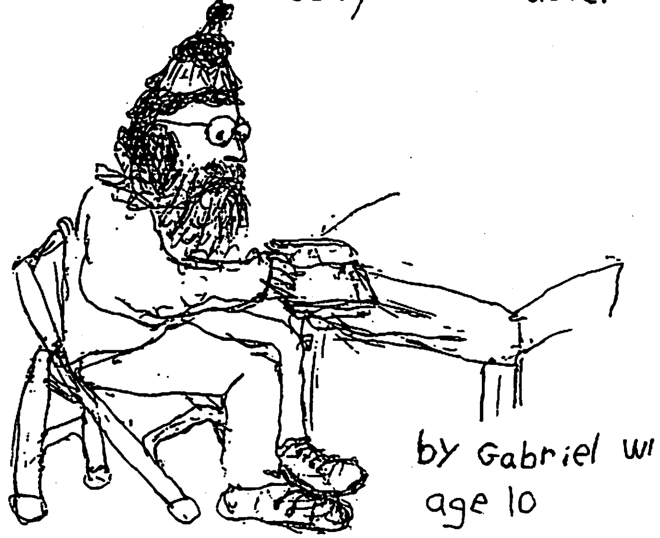
8031-8033 Reed Canary Grass *Phalaris arundinacea* Vigorous, tall-growing, widely adapted to many soil conditions; it has attracted attention recently as a fast-recovering grass for intensive pasture programs. Well-suited to long-term pasturing. We carry Rival which is low in alkaloids, especially developed as palatable forage. Rival is well-adapted to the Northeast. Although long-relegated to ditches and waterways because it will tolerate standing water, reed canary grass is also extremely drought tolerant. Grows quickly in spring, heading up in late May to June. Spreads by creeping rhizomes. Seeding in late summer will reduce weed pressure. Sow with birdsfoot trefoil for long-term hay and pasture in a variety of soil conditions. Seed at 8-10#/acre. NEW!
8031 2# $10.00 ; **8032** 10# $40.00; **8033** 50# $155.00

Ryegrass *Lolium* spp. We now offer two varieties of ryegrass—annual and perennial. Ryegrasses tolerate a wide range of conditions and will grow well even with little fertility and in acid soils. They have dense, fibrous and deep root systems; will withstand temporary flooding and are effective at holding soil and improving tilth. Cross-pollinate easily.

8041-8044 Annual Ryegrass *L. multiflorum* Seeded heavily in early spring or early fall, annual rye will establish quickly in cool wet weather, provide a dense cover and outcompete weeds. Seeded thinly, it is a good companion crop, suppressing weeds as the slower germinating crops get established. Uncut, annual ryegrass will grow to 2-4', but should be kept mowed to prevent reseeding. Seed at 14-35#/acre, ½-2#/1000 sq ft.
8041 2½# $3.75; **8042** 5# $6.00; **8043** 25# $22.50; **8044** 50# $40.00

8046-8049 Perennial Ryegrass *L. perenne* A short-lived cool weather perennial. Germinates quickly and grows rapidly, suppressing weeds and allowing slower-growing companions to establish themselves. For this reason it is often used in grass mixtures, coming up quickly, then fading as the other grasses get established. Perennial ryegrass can also be used as a living mulch in Zones 5 and warmer, providing winter storm protection and weed control. Seed at 14-35#/acre, ½-2#/1000 sq ft.
8046 2½# $6.500; **8047** 5# $10.50; **8048** 25# $45.00; **8049** 50# $80.00

A Seedy Character



by Gabriel willow
age 10

8051-8053 CR Lawn Mix Recommended grass seed mixture for all-purpose use in the Northeast. 50% bluegrass, 30% red fescue, 15% perennial ryegrass, and 5% white clover. Good for a range of conditions, from full sun to partial shade. Bluegrass does well in full sun, red fescue in shade. Perennial ryegrass provides quick germination and good color while the other grasses get established, and the clover adds nitrogen and interest for the bees. Seed at 140#/acre, 4#/1000 sq ft.
8051 4# $9.00; **8052** 17½# $32.00; **8053** 35# $55.00

8056-8058 Sorghum/Sudangrass *Sorghum* x *drummondii* Vigorous hybrid summer annual is unsurpassed at suppressing weeds. Can grow to 6' if irrigated. Tolerates mowing and can be used for hay. Tends to lodge when planted thickly in fertile soil. Plant when ground is thoroughly warm. Seed at 10-36#/acre, 1#/1000 sq ft. Use the higher rate of seeding for weed suppression.
8056 2½# $3.00; **8057** 10# $9.50; **8058** 50# $35.00

8061-8063 Timothy *Phleum pratense* The earliest cultivated pasture grass, first cultivated in America by a farmer who found it growing along the banks of the Piscataqua River near Portsmouth, NH. In 1914 Timothy was called "by far the most important hay grass in America." (Forage Plants and their Culture by Charles Piper). Best adapted to clay or loam soils with lots of moisture, it produces good yields, resists lodging and is easily cut and cured. Timothy sown with red clover provides excellent forage and strong yields. The seed may be drilled or broadcast. Seed alone or with winter wheat in the fall; in spring, seed with red clover, birdsfoot trefoil or alfalfa. Seed at a rate of 12-15#/acre alone or 9#/acre when mixed, ½#/1000 sq ft.
8061 10# $12.00; **8062** 25# $25.00, **8063** 50# $40.00

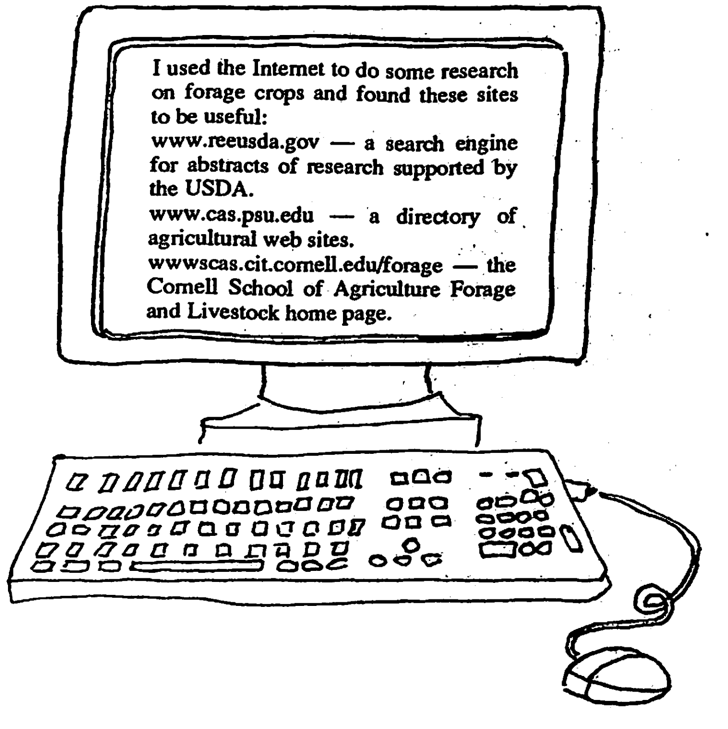
> Over the western persimmon . . . . over the longleaved
> corn and the delicate bluefowered flax;
> Over the white and brown buckwheat, a hummer and a
> buzzer there with the rest,
> Over the dusky green of the rye as it ripples and shades in
> the breeze...
>
> *Song of Myself*
> Leaves of Grass 1855

8101-8103 Robust Barley *Hordeum vulgare* A six-row barley valuable as a cover crop and as feed, and invaluable in beer-making. Excellent spring cover crop, fast growing and abundant, barley produces the most biomass of any grain and outcompetes weeds very effectively. Thrives on well-drained fertile soil but tolerates alkaline and heavy soils as well as drought. As a trap crop, barley takes up nitrogen. Barley grain is sprouted and toasted to make malt. For a home-grown home-brewing experience plant some hops (Fedco Trees 1999 **#2672 & 2675**) and barley. Maine-grown seed comes out of Aroostook with the potatoes. Seed at 60-90#/acre, 3#/1000 sq ft. *Not available for pickup until April 8. Cannot be shipped until April 12 and after.*
8101 5# $3.00; **8102** 25# $11.00
8103 48# $18.00

FAVORITE
BUCK-WHEAT

8111-8113 Japanese Buckwheat *Fagopyrum esculentum* Large-seeded type. Excellent smother crop. Easy to turn into the soil. Cut and incorporate when plant is newly in flower. Makes phosphorus available for next crop and loosens clay soils. Will grow on almost any soil but prefers light well-drained soils. Responds well to fertility, holding it for subsequent crops. Tolerates more soil acidity than any other grain crop. Short maturity allows 2-3 crops per season. Killed by frost. Bees like its white flowers and beekeepers prize buckwheat honey. Seed at 35-134#/acre, 2-3#/1000 sq ft.
8111 5# $5.00; **8112** 25# 18.50; **8113** 50# $27.50

8121-8123 Japanese Millet *Echinochloa frumentacea* Tender annual tolerates low soil pH but requires adequate nitrogen and potassium. Very good smother crop. Extensive root system. Mature plants are 6' tall and lush, and require a tractor to till in, though short plants can be incorporated with a tiller. Customer Judy Rock raves about millet: "Grows well with spreading roots even in poor soil. Makes a *lovely* plant. We harvest the seed heads for beautiful ornamentals and the birds love them too. Stalks *disappear* after winterkill and cause no trouble in spring." Try over-seeding millet into a spring crop to take advantage of a summer fallow period before fall planting. And remember to plant millet for the birds. Seed at 30#/acre, ¾#/1000 sq ft.
8121 2½# $3.00; **8122** 10# $7.75; **8123** 50# $30.00

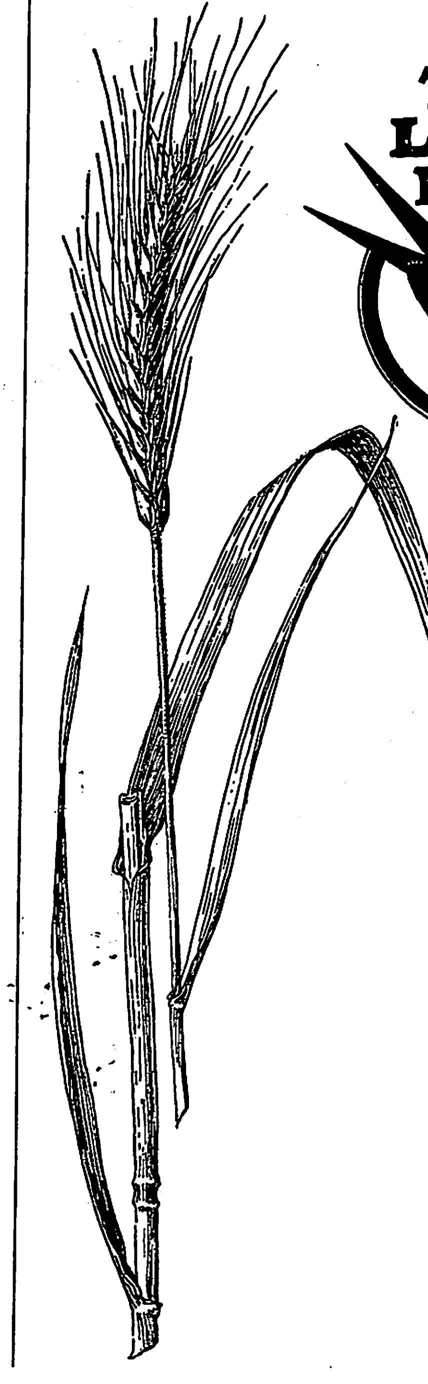


I used the Internet to do some research on forage crops and found these sites to be useful:
www.reeusda.gov — a search engine for abstracts of research supported by the USDA.
www.cas.psu.edu — a directory of agricultural web sites.
wwwscas.cit.cornell.edu/forage — the Cornell School of Agriculture Forage and Livestock home page.

8131-8133 Garry Oats *Avena sativa* We offer Maine-grown Garry Oats. Plant as winter cover in early September, as grain in early spring, or as a nurse crop when seeding clover. Oats will winter-kill and hold soil with a mat of vegetation. After early-August garlic harvest, we plant oats in the garlic beds. They stay green into November and provide a ready-mulched bed in spring. Oatstraw tea nourishes the nervous system. Seed at 110#/acre, 3-4#/1000 sq ft.
8131 5# $3.00; **8132** 25# $11.00; **8133** 64# $18.00

8141-8143 Pennuda Hull-less Oats *Avena nuda* A mid-season medium-height grain with superior lodging resistance, almost completely free of the inedible hull of ordinary oats. After threshing, float any bits of hull away and air-dry. Then sit down and enjoy. MOFGA-certified organic; grown by Jim and Megan Gerritsen at WoodPrairie Farm in Bridgewater. Plant 2-3#/1000 sq ft.
8141 2½# $5.50; **8142** 5# $10.00; **8143** 10# $16.50

8151-8153 Winter Rye *Secale cereale* The most popular winter cover in the Northeast. Best planted in early September to give good growth before winter dormancy, but may be planted as late as mid-October. Incorporate in spring at least 3 weeks before planting. Undecomposed residue may inhibit germination and growth of subsequent crops. We are pleased that this year's crop comes from a third-year transitional organic field on Two Loons Farm. Seed at 60-200#/acre, 3-4#/1000 sq ft.
8151 5# $3.00; **8152** 25# $12.00; **8153** 56# $20.00



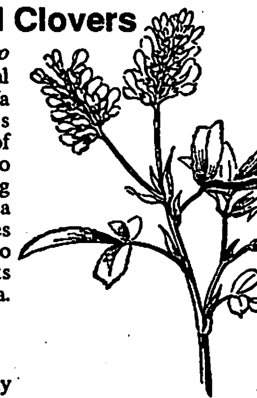
TWO LOONS FARM

On 600 acres overlooking China Lake, Two Loons Farm swims against the tide of vanishing small farms. In 1980, Paige Tyson and Spencer Aitel began dairy farming with one cow. In 1988, with twelve head, they started selling milk to a commercial dairy. Long commited to organics, they began the transition to organic dairy farming three years ago.

Today they milk 65 head and manage a herd of 140 registered Jerseys with rotational grazing, in addition to tending their sheep, pigs, turkeys and chickens. They have been selling milk to The Organic Cow of Vermont for two years.

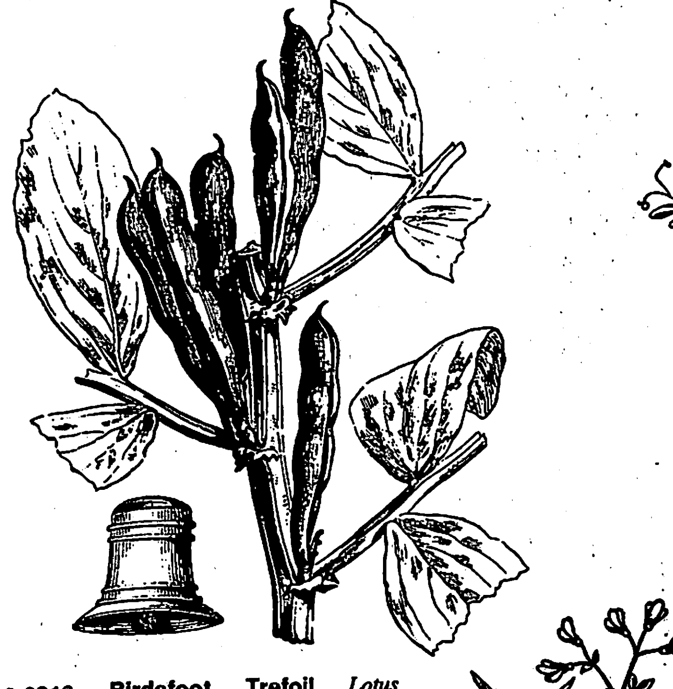
They grow grasses, grain and corn for their livestock on 260 certified organic acres. As Tina Densmore of The Organic Cow said, "They are awesome farmers!"

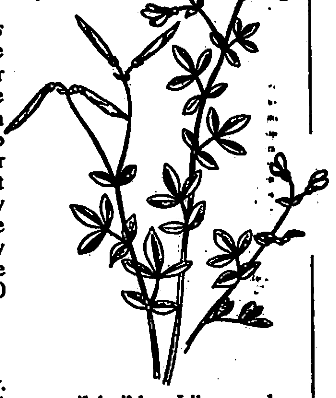
Legumes and Clovers



8201-8204 Perennial Alfalfa *Medicago sativa* Widely used in Southern and Central Maine for perennial alfalfa fields. Alfalfa in combination with any other grass is excellent forage, good for a wide variety of soil and management conditions. Also suitable for garden use if you're planning to leave an area out of production for a season or two. Can be cut several times over the summer to make compost and to help eliminate perennial weeds. Herbalists harvest alfalfa to make a nutritious tea. Seed at 15-20#/acre, ½#/1000 sq ft.
8201 ½# $3.00; **8202** 2# $7.00;
8203 10# $27.50; **8204** 50# $125.00

8211-8213 Bell Bean *Vicia faba* Highly recommended. Vigorous small-seeded fava bean which can be planted in very early spring, germinating and growing well in soils between 35-45°. Also good sown in fall—grew even as the snow fell. Bell beans are an excellent choice for a green manure, providing large amounts of nitrogen and biomass. The taproot and large stems add organic matter to soils when turned under. Will tolerate a wide range of soil conditions and pH. Bell beans grow rapidly in cool weather producing as much as 100#/acre of nitrogen in just six weeks, up to 220#/acre in the course of a season. Aggressive taproot breaks up hardpan and mines the subsoil nutrients for succeeding crops. Attracts bees and beneficial insects as well as improving soils. Plant with the earliest spring crops, seeding at a rate of 80-170#/acre, 2-4#/1000 sq ft.
8211 2½# $4.50; **8212** 10# 12.75; **8213** 50# $45.00

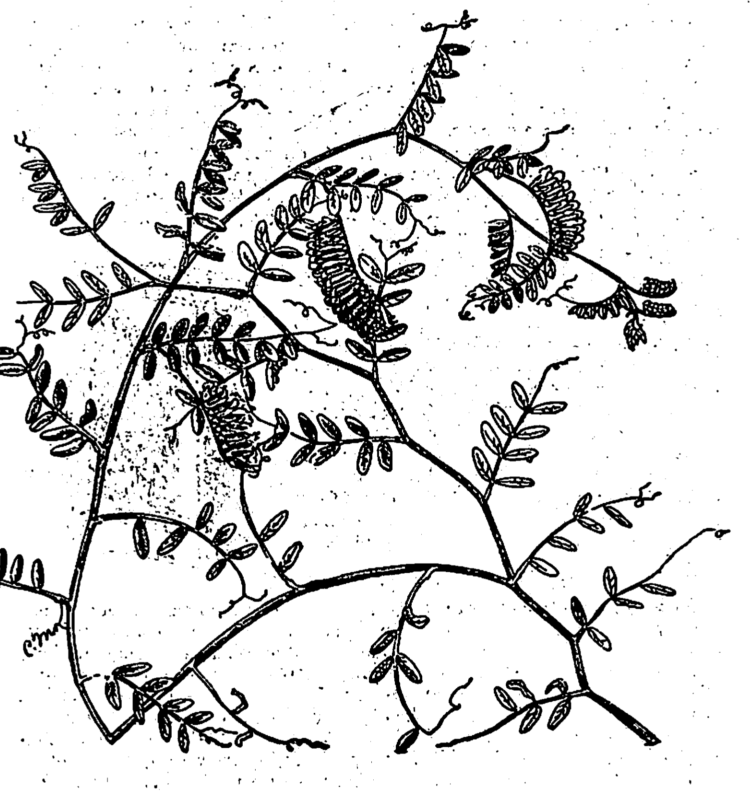




216-8218 Birdsfoot Trefoil *Lotus orniculatus* A low-growing perennial legume vith stout roots and numerous slender preading branches 6-18" long. Does not cause loat, and retains its palatability for late-season razing. Valuable pasture plant resistant to eat and drought yet does well in cooler limates. Grows on land too poor to support ed clover or alfalfa. Does well in shallow edgy soil and tolerates salt. Use in a mixture with timothy, smooth brome or reed canary grass for long-term hay and pasture on a wide variety of soils. Seed at 12-18 #/acre, ½#/1000 sq ft.
8216 2# $7.50; **8217** 10# $30.00;
8218 50# $125.00

8221-8223 Field Pea *Pisum sativum* var. *arvense* Cold-tolerant weed-smothering workhorse soil builder. Likes cool moist growing conditions and withstands heavy frost. Fixes nitrogen at 170-190#/acre and produces lots of excellent hay or pasture for livestock. Will grow in most soil types but prefers well-drained loams. Sow alone or with a nurse crop such as oats to help it stand. The early shoots of field peas are wonderful stir-fried or steamed. Seed at 100-220#/acre, 4#/1000 sq ft.
8221 5# $3.75; **8222** 25# $12.00; **8223** 50# $20.00

8231-8233 Madison Hairy Vetch *Vicia villosa* subsp. *villosa* Successfully and extensively tested by MOFGA farmers as well as UMO's Sustainable Agriculture program for winter hardiness in Maine. Excellent nitrogen fixation, 100+ #/acre. Plant with rye; the rye supports vetch vines in the spring and holds the soil over the winter better than the taprooted vetch. (See #8261 Vetch/Rye Mix.) Tolerant of acidic soils and low fertility, but not poor drainage. Vetch is a vigorous grower, generating copious amounts of organic matter. Its vigor can create problems: Farmers using both flail mowers and sickle bar cutters reported clogging and tangling when they attempted to mow summer-sown vetch. Maine ag experts recommend later planting for better control. Use a flail mower in fall and plow under in spring before it becomes unmanageable. Seed at 20-40#/acre, 1#/1000 sq ft.
8231 2# $7.00; **8232** 10# $25.00; **8233** 50# $110.00

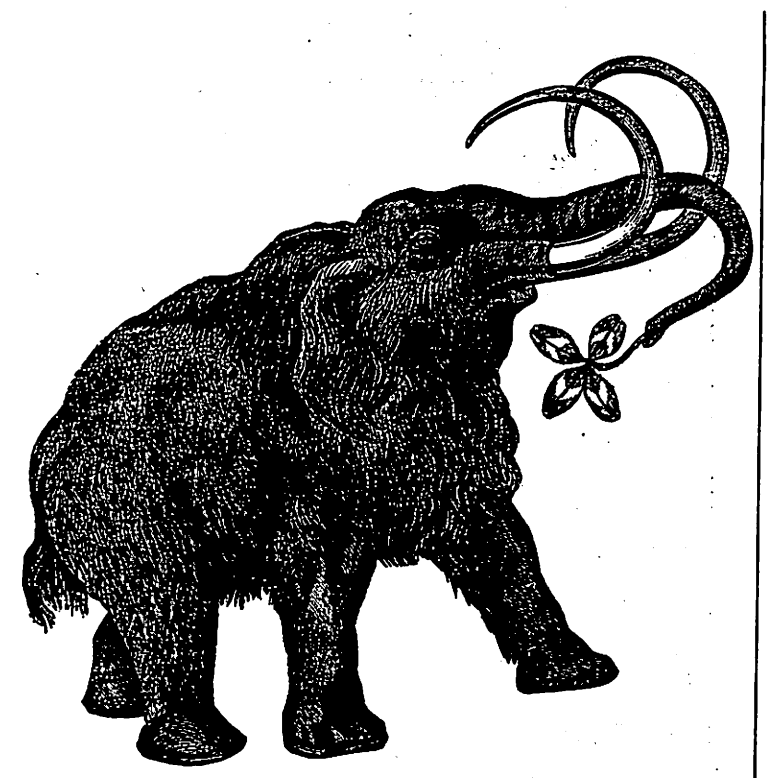


> I jump from the crossbeams, and seize the clover and
> timothy,
> And roll head over heels, and tangle my hair full of wisps.
>
> *Song of Myself*
> Leaves of Grass 1855

8251-8253 Soil-Building Seed Mix Recent Maine trials show this mix of oats-peas-hairy vetch to be a superior soil-building seed mix. In tests, this mix has created as much as 8000# biomass/acre at maturity. The oats come up first and are pulled down by peas, which are eventually pulled down by the smothering vetch. 4" mat of vegetation should be disked or mowed and incorporated in autumn. We use the hardy Madison vetch in our mix. Seed at 212#/acre, 5#/1000 sq ft.
8251 2½# $3.25; **8252** 10# $8.00; **8253** 50# $35.00

8261-8263 Madison Hairy Vetch/Winter Rye Mix Superb cover mix for fall planting. Produces abundant green manure, adds nitrogen to the soil and suppresses weed growth. The rye acts as a nurse crop for the vetch, protecting it from frost damage and providing support for the vines, making subsequent mowing much easier. Excellent choice for a field that will not be planted the following spring. Mow after flowering to kill the plants, then incorporate by tilling, allow 3-4 weeks for the rye to decompose before replanting. Seed at 90#/acre, 2#/1000 sq ft.
8261 2# $3.25; **8262** 12# $11.25; **8263** 45# $37.50

8301-8304 Crimson Clover *Trifolium incarnatum* Rapid growth in cool weather makes this an excellent spring or fall green manure. A good choice for a cover crop in orchards because it is shade tolerant, and its fast germination and thick growth provide good weed control. In June of '96 in warm wet conditions, ours germinated in two days and made a thick dark green carpet in a week. Handsome plant with bright green leaves. Stunning crimson spikes on 18" plants make good cutflowers. More disease-resistant than other annual clovers. Will grow on most well-drained soils. Seed at 9-40#/acre, ¼-2#/1000 sq ft.
8301 ½# $2.75; **8302** 2# $7.00; **8303** 10# $30.00; **8304** 50# 125.00



8311-8314 Mammoth Red Clover *Trifolium pratense* A short-lived perennial clover, best treated as a biennial, mown or grazed the first year, turned under the second year for green manure. Adds as much as 100#/acre of nitrogen in a season. Tolerates shade and can be undersown or overseeded into row crops and grains. Deep taproot raises nutrients from the subsoil. Best planted in early spring with a nurse crop of oats. Excellent hay crop planted alone or with grasses. In multiple hay cuttings it will produce as much as 7,120#/acre of dry matter in a season. A timothy/red clover mix produces more hay per acre than either planted alone. Seed at 7-18#/acre alone or 5-8#/acre when mixed with grasses, 1/2#/1000 sq ft. Red clover blossoms, fresh or dried, make one of our favorite teas, one which cleanses the blood gently and is safe for long-term use.
8311 1/2# $2.00; **8312** 2# $4.00; **8313** 10# $16.00; **8314** 50# $60.00

8321-8324 Annual White Sweet Clover *Melilotus albus* var. *annua* Very effective soil builder produces a large quantity of biomass and its roots penetrate even hardpan soils. It even grows in the crushed rock fill outside our warehouse. Quick to establish compared to biennial sweet clovers. Pennsylvania stands seeded in early May stood 6' high by July. Deep taproot mines phosphorus and other minerals from the subsoil, making them available to later crops. Good bee plant. Sensitive to soil acidity—needs pH 6.2-7.2 for proper nodulation for nitrogen fixing. Poor cold tolerance, growth slows in fall. Seed at 15-30#/acre, 3/4#/1000 sq ft.
8321 1/2# $3.00; **8322** 2# $8.00; **8323** 10# $35.00; **8324** 50# $150.00

8331-8334 Dutch White Clover *Trifolium repens* A slightly lower-growing clover (6"), less tolerant of heat and sun than New Zealand Clover. Ideal for use in garden paths where it suppresses weeds, keeps soil friable and stores up nitrogen in its roots for next year's crops. The perennial white clovers are not heavy biomass producers, an advantage for small gardeners who can keep a "living mulch" in their garden paths without requiring anything heavier than a hand scythe or lawn mower to maintain control. We like clover in our lawn. It looks lush and feeds nitrogen to the grasses. Clover was pronounced a lawn "weed" when chemical companies started encouraging the use of broadleaf herbicides. Seed at 6-14#/acre, 1/4#/1000 sq ft.
8331 1/2# $3.50; **8332** 2# $9.50; **8333** 10# $40.00; **8334** 50# $170.00

8341-8344 New Zealand White Clover *Trifolium repens* Hardy, long-lived and self-propagating perennial with a fibrous root system which spreads easily once established. Very useful as green manure or erosion control in steep or trafficked areas. Tolerates shade, mowing and excessive moisture. Grows best in clay to loam soils. Good bee forage. More vigorous and, at 8", slightly taller than Dutch variety. Our most popular clover. Seed at 6-14#/acre, 1/4#/1000 sq ft.
8341 1/2# $2.75; **8342** 2# $7.00; **8343** 10# $30.00; **8344** 50# $120.00

8351-8354 Yellow Sweet Clover *Melilotus officinalis* Long thick taproots do an excellent job of breaking up subsoils and improving soil aeration. They bring up phosphorus and potassium in the process. Bees love sweet clover. Plant in spring with a nurse crop of oats for weed suppression. Most of its growth will occur the following year. Seed at 9-20#/acre, 1#/1000 sq ft.
8351 1/2# $2.00; **8352** 2# $4.00; **8353** 10# $15.00; **8354** 50# $60.00

Inoculants

8501-8502 Legume Inoculant For peas, beans, limas, favas, hairy vetch, sweet peas and our soil-building mix.
8501 Pkg treats 8# of seed (0#) $2.50;
8502 Pkg treats 60# of seed (0#) $4.00

Legume inoculant is also available with peas, #798 on seed order.

8504-8505 Alfalfa/Clover Inoculant For alfalfa and the following clovers: annual white sweet clover, yellow sweet clover, white, crimson, and mammoth red.
8504 Pkg treats 10# of seed (0#) $2.00;
8505 Pkg treats 50# of seed (0#) $3.25

8507 Soybean Inoculant What else? For soybeans.
8507 Pkg treats 60# of seed (0#) $2.00

8509 Birdsfoot Trefoil Inoculant Need we say more?
8509 Pkg treats 50# of seed (0#) $3.25

Legume Inoculation: Legumes such as beans, peas, clover and alfalfa make nitrogen from the air available to plants because their roots shelter bacteria of the genus Rhizobium, which live on the roots in a symbiotic relationship to legumes. The plant roots feed the bacteria while the bacteria take molecular nitrogen from the air and convert it into a form that the plant can use.

Different legumes require different species of rhizobia to form a successful relationship. Our legume seed is sold "raw": It has not been inoculated with the appropriate bacteria in a process called "rhizocoating." Because the seed maintains good germination longer than the bacteria remain viable, we prefer to sell fresh inoculant each year and allow you to treat the seed at the time of planting.

Use fresh inoculant each time you plant a legume even if you have planted inoculated seed in the same spot before. When you are ready to put the seed in the ground, moisten it with water, pour the inoculant over it and mix. Protect from direct sunlight and plant before the seed dries out or remoisten and remix.

The cost of nitrogen from legume seeds

Legumes as cover crops have the great benefit of increasing the amount of nitrogen in the soil. This chart shows the cost of adding nitrogen by using cover crops. The price per pound is based on our largest size.

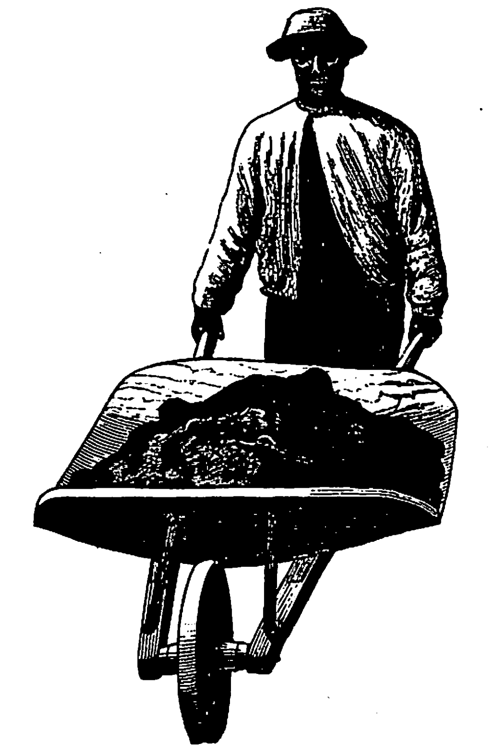
	Nitrogen producing Crop	#seed/acre	price/# of seed	average #N/acre	#N/acre/# seed	Price of #N	#N/ $1.00
8204	Alfalfa	20	2.50	100	5.0	.50	2.00
8213	Bell Bean	125	0.90	145	1.16	.78	1.29
8223	Field Pea	145	0.40	172	1.19	.34	2.94
8233	Madison Hairy Vetch	30	2.20	110	3.67	.60	1.67
8304	Crimson Clover	25	2.50	100	4.00	.62	1.61
8314	Mammoth Red Clover	13	1.20	110	8.46	.14	7.14
8324	Annual White Clover	30	3.00	80	2.67	1.12	.89
8334	Dutch White Clover	10	3.45	130	13.00	.27	3.77
8344	New Zealand White Clover	10	2.40	130	13.00	.18	5.55
8354	Yellow Sweet Clover	15	1.20	130	8.67	.14	6.94

In addition to cost of seed, one must consider the time involved in preparing the seed bed and the loss from having the bed out of production.

The cost of nitrogen in fertilizers

	Fertilizer	%N	#N/50#	price/50#	Price of #N	#N/ $1.00
8602	Alfalfa Meal	2.4	1.2	15.25	12.78	0.08
8617	Blood Meal	12.0	6.0	37.00	6.17	0.16
8632	Feather Meal	9.0	4.5	27.50	6.11	0.16
8637	Fish Meal	8.0	4.0	32.00	8.00	0.13
8702	Fertrell 3-2-3	3.0	1.5	17.25	11.50	0.09
8707	Ocean Organics 5-4-4	5.0	2.5	32.00	12.80	0.08
	Agway Lawn Fertilizer	10.0	5.0	10.00	2.00	0.50

Fertilizers, besides being ready to use, as opposed to waiting for the cover crop to mature, make other nutrients available to plants. But for long term additions of nitrogen, cover cropping is an excellent way to go.



Rock Powders and Soil Amendments

Thriving sustainable agriculture is built on the ground of a healthy soil. Do a soil test to determine your soil's needs before embarking on a program of soil improvement. Check with your local Cooperative Extension for testing services in your area or use our mail-in service (#9201-2).

Rock powders and soil amendments used with a program of crop rotation, composting and cover cropping will restore fertility, improve soil tilth, promote disease resistance, support the population of soil microorganisms necessary to plant growth and even help restore balance to the garden and the world around it. Used with organic fertilizers, rock powders and soil amendments will help address immediate fertility needs as well as long-term requirements of sustainable growth.

The demand for protein to feed meat animals curtails the availability and attractiveness of animal products as an efficient source of long-lasting nitrogen. We will continue to carry these products as long as the price remains reasonable and questions about their safety can be answered; however, prudence dictates putting a strategy in place now which will provide an alternative source of nitrogen by cover-cropping with legumes and using locally produced composted manure.

8601-8604 Alfalfa Meal (2.6-0-2.3 avg.) Excellent alternative to blood meal as a nitrogen source. Gives plants a noticeable quick boost. It is the nitrogen source in Fedco Bulb Fertilizer. Apply at 2-3#/100 sq ft or 800#/acre.
8601 5# $3.50; **8602** 50# $15.50;
8603 10+ $13.50/bag;
8604 pallet (40 bags) $485.00

8606-8609 Aragonite A source of calcium that is very low in magnesium. If you have been using dolomitic limestone over the years to sweeten your soil, magnesium may be tying up other nutrients in your soil. A few years with aragonite will allow the soil to come back into balance.
8606 5# $2.50; **8607** 50# $8.00;
8608 10+ $7.00/bag;
8609 pallet (40bags) $250.00

8611-8614 Azomite (0-0-2.5, 5% Ca) Contains over 67 minerals beneficial to plants and animals The name comes from the A-to-Z of Minerals Including Trace Elements. Mined in Utah and passed through a 200 mesh screen. CR has grown better tomatoes since he started using Azomite and likes it for corn and melons too. Roberta has added Azomite to her garlic beds for the past seven years. It has increased the proportion of huge heads in her harvest from about 10% to about 40%. Broadcast at 300-600# an acre. Be sure to use dust protection as it is a fine powder. Use in potting soil and compost. Especially effective as a foliar feed; allow the heavier portion to settle before adding to the sprayer. As a liquid fertilizer add 1 tsp per gallon. Approved for feed use as an anti-caking agent, feed at 1-2% of the mix. Bags range from 38-42#.
8611 5# $4.00; **8612** 40# $16.00
8613 10+ $14.25/bag; **8614** pallet (50 bags) $600.00

8616-8617 Blood Meal (12-0-0) Has the fastest release time of any organic nitrogen source. As a side dressing, apply at 3/4#/100 row ft. 3 wks after transplanting or 4 wks after seeding, or till into soil at 3-5#/100 sq ft. The increasing use of animal protein in cattle and swine feed is affecting not only the safety of commercially processed meat but also increasing the volatility of blood meal prices. We cannot offer a firm price for large quantities. If you are interested in buying 10 or more 50# bags, please call for a price quote.
8616 5# $7.00; **8617** 50# $40.00

8621-8624 Bone Meal (1-11-0 plus calcium) Steamed ground bones. The source of the most readily available phosphorus and calcium for gardens, greenhouses and flower bulbs. Perennials love it; so do skunks. Use 1-2#/100 sq ft.
8621 5# $4.50; **8622** 50# $28.00
8623 10+ $25.00/bag; **8624** pallet (40 bags) $950.00

8626-8629 Colloidal Phosphate (18% phosphorus, 2% readily available. 21% calcium, trace minerals) This soft-rock phosphate is an excellent choice for calcium-deficient soils; the phosphorus helps the plants take up the calcium. In addition, colloidal phosphate contains fine clays which help sandy soils retain water and nutrients. Use combined with green manures for soil rebuilding, or by itself to give plants immediate doses of phosphorus.
8626 5# $3.00; **8627** 50# $10.00
8628 10+ $9.00/bag; **8629** pallet (40 bags) $320.00

8631-8634 Feather Meal (9% nitrogen) A good source of long-term nitrogen. The nitrogen in feather meal is bound up in tightly coiled protein molecules which are slowly broken down by the action of soil microbes. Adding feather meal in the fall when late-season cover crops are plowed under helps prevent nitrogen lockup in the spring.
8631 5# $4.50; **8632** 50# $27.50
8633 10+ $25.00/bag; **8634** pallet (40 bags) $950.00

8636-8638 Fish Meal (9-3-1 plus 60% protein) If smell is anything to go by, this is our most potent amendment. Excellent source of nitrogen and phosphorus. Contains menhaden, fished for centuries up and down the East coast from Maine to North Carolina, as a source of fish meal and fish oil. Use as a sidedressing applied at the same rate as blood meal or mixed into wetted compost to provide added nitrogen and a bacterial boost.
8636 5# $6.00; **8637** 50# 32.00; **8638** 10+ $29.00/bag

8641-8644 Granite Meal (0-0-5) A good source of potassium in the form of potash which plants need for sugar and starch production. Unlike wood ashes or Sul-Po-Mag, granite meal can be added to the soil in large amounts without altering the pH. Greatly enhances soil structure and promotes healthier plants. Application rates are 10#/1000 sq ft, or 4000# /acre.
8641 5# $3.00; **8642** 50# $9.00
8643 10+ $8.00/bag; **8644** pallet (40 bags) $285.00

8646-8649 Greensand (0-1-7, 3% Mg, 20% Fe) An heirloom soil amendment. "Greensand has been successfully used for soilbuilding for more than 100 years," according to Rodale's Encyclopedia of Organic Gardening. An organic source of potassium from 70-80 million-year-old marine deposits. Contains marine potash plus silica, iron oxide, magnesia, lime, phosphoric acid and as many as 30 other trace minerals. Loosens clay soils and improves sandy soils. Provides a slow release of potassium. Apply at 2-5#/100 sq ft. or 500-2000#/acre depending on soil test.
8646 5# $3.00; **8647** 50# $9.00
8648 10+bags $8.00/bag; **8649** pallet (40 bags) $285.00

8651-8654 Kelp Meal Dried and ground seaweed contains trace minerals, enzymes and amino acids. An excellent source of naturally chelated elements. Brassicas respond well to it. Mix into the soil at the rate of 1#/100 sq. feet or 300-600#/acre. As an animal feed supplement it will improve production and enrich the manure for compost or crop application. Use at 1-2% of ration.
8651 5# $5.00; **8652** 50# $32.00
8653 10+ $29.00/bag; **8654** pallet (40 bags) $1,000.00

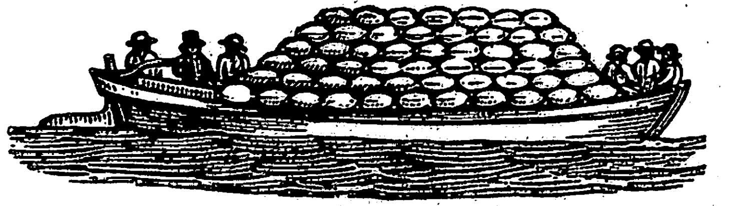
8657-8659 Menafee Humates Hundreds of millions of years ago the lush rainforests and tropical swamplands of Precambrian New Mexico produced plant matter that, through millions of years of composting and burial under layers of water and sand, metamorphosed into the coal-like material of the Menafee formation. Tectonic and volcanic activity brought it back to the surface and exposed the layer for mining. Humates contain 65% humic acid in a carbon matrix to chelate minerals and nutrients making them more easily available to soil microorganisms and plants. Extensive tests at agricultural stations have shown marked crop improvement when Menafee humates were applied. Use 250 to 400#/acre/year in several applications and mix into the soil surface for best results. NEW!
8657 50# $14.00; **8658** 10+ $12.50/bag; **8659** pallet (40 bags) $450.00

8661-8664 Planter's II Trace Minerals Fertilizer (0-0-.09, 5% Ca, 5% S) Mined in Colorado from the remains of the great inland sea, crushed and then pelletized with the addition of brewers yeast, Planters II is 14% silicon, 5% calcium and 5% sulfur along with 28 other trace elements necessary to plant health. In a study reported in a 1996 issue of Remineralize the Earth, a North Carolina high school student showed that all rock dusts improve the growth rate of mahogany seedlings, with Planters II achieving the best results. Our garlic planted in beds with Planters II had lusher, greener foliage and better shaped, more forthright bulbs. Apply at a rate of 100#/acre in rows or 250#/acre broadcast to improve germination and stimulate stronger root formation and overall plant vigor.
8661 5# $3.00; **8662** 50# $17.50
8663 10+ $15.00/bag; **8664** pallet (40 bags) $540.00

8666-8669 Rock Phosphate (30% total phosphorus) Rock phosphate has more total phosphate than colloidal and is less dusty. Phosphate from mineral sources breaks down and becomes available slowly. A well-balanced microbiologically active soil will improve the rate of availability. Apply every four years at 5#/100 sq ft or 1000-2000#/acre depending on soil test.
8666 5# $3.00; **8667** 50# $10.00
8668 10+ $9.00/bag; **8669** pallet (40 bags) $330.00

8671-8674 Sul-Po-Mag (0-0-22, 11% Mg, 17% S) Langbeinite is a marine deposit of potassium sulfate and magnesium sulfate in soluble form. A good source of immediate potassium for depleted soil and of magnesium where calcium is abundant. Alliums like its sulfur and potatoes like its quick boost of potassium. Apply ½-1#/100 sq ft, 200-500#/acre depending on the results of your soil test.
8671 5# $4.00; **8672** 50# $14.00
8673 10+ $12.50/bag; **8674** pallet (40 bags) $435.00

8677-8679 Sulfur Used to lower soil pH. Not fine enough to be spread as a fungicide. Apply in small amounts 1-2#/1000 sq ft, 200-400#/acre.
8677 50# $25.00; **8678** 10+ 22.50/bag; **8679** pallet (40 bags) $850.00



Savings on multiple bags of soil amendments.
Soil amendments cost less when you buy 10 or more bags and are even cheaper by the pallet. The price is FOB Clinton. If you need to have them shipped, please call (207) 873-7333 for a shipping quote.

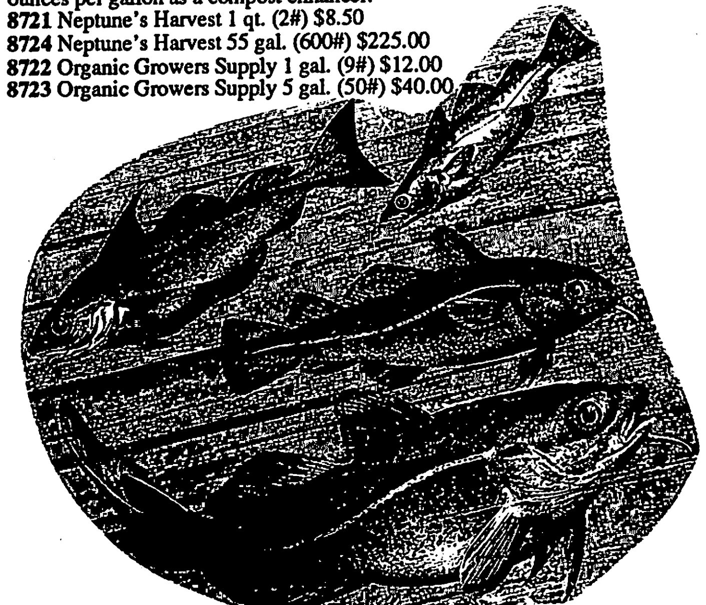
Fertilizers

Fertilizers provide nitrogen and nutrients in a form that can be taken up by plants as needed. Foliar sprays get nutrients directly to the leaves and are important sources of amino acids which increase resistance to disease and to insect infestation. Our products provide an immediate boost and, unlike inorganic chemical fertilizers, additional long-term fertility, feeding both the plants and the organisms that maintain soil health.

8701-8704 Fertrell Super (3-2-3) Organic slow-release plant food made with rock phosphate, peanut meal, blood meal, bean meal, chicken manure and sulfate of potash. Apply when planting at 2-3#/100 row ft and side-dress at the same rate when plants are a few inches high. Can be used under transplants at ¼ cup per hole. Side-dress later if needed.
8701 5# $3.50; **8702** 50# $17.50; **8703** 10+ $15.50/bag
8704 pallet (40 bags) $560.00

8706-8708 Ocean Organics Fertilizer (5-4-4) Custom-blended exclusively for us in Waldoboro. An organic mix of kelp meal, fish meal, rock phosphate, bone meal and feather meal, bound together with sea plant extract then pelletized at low temperatures to preserve the microbes and enzymes. Apply at 2-3#/100 row ft. For best results place fertilizers well below seed depth to encourage root growth.
8706 5# $6.00; **8707** 50# $32.00; **8708** 10+ $29.00/bag

8721-8724 Fish Emulsion (2-4-.5 with trace minerals) A natural organic fertilizer made from fresh North Atlantic fish. The nitrogen from fish protein breaks down slowly in the soil and won't leach out. Concentrated, use one ounce per gallon of water for garden application or foliar spray, two ounces per gallon as a compost enhancer.
8721 Neptune's Harvest 1 qt. (2#) $8.50
8724 Neptune's Harvest 55 gal. (600#) $225.00
8722 Organic Growers Supply 1 gal. (9#) $12.00
8723 Organic Growers Supply 5 gal. (50#) $40.00



8726-8728 Sea Plus (3-2-2) Made by Living Acres, Sea-Plus combines the nitrogen, phosphoric acid and potassium of ocean fish emulsion with the trace minerals and amino acids of liquid seaweed. For best results spray plants in the forenoon during critical stages in the growth cycle. Dilute at the rate of 3 Tbsp per gallon of water.
8726 1 pt. (1#) $5.00; **8727** 1 gal. (9#) $15.00; **8728** 5 gal. (50#) $55.00

8731-8733 Sea Cure Blend of marine plants provides nitrogen compounds, trace minerals, amino acids. Improves plant vigor, reduces transplant shock, increases resistance to insect damage and makes plants more frost resistant. The amino acids contained in seaweed improve disease resistance when applied as a foliar feed. Use as a spray in orchards and fields to help protect against insect infestation. Crocker's Fish Oil (#8865-8867) used as a spreader-sticker will increase coverage and absorption. Can be applied to seed, root or leaf. 1 pint makes up to 32 gallons of spray depending on application rate.
8731 1 pt. (1#) $5.00; **8732** 1 gal. (9#) $14.00; **8733** 5 gal. (50#) $50.00

8736 Wettable Seaweed Powder A highly concentrated powder. One package makes one gallon of liquid seaweed concentrate. Use the concentrate at a rate of 1 Tbsp/gallon as an excellent foliar spray containing growth hormones, trace minerals, enzymes and carbohydrates. Keep powder sealed; it absorbs water.
8736 10.7 oz. (0#) $9.00

8741-8742 Hydrolized Fish Powder (11-.25-1) Customers were disappointed last year when we ran out of Foliafish and so were we. Fortunately we have found a replacement. 4# mixed with at least 20 gallons of water is a good foliar spray for orchards and fields. Apply before blossom, at early leaf stage, at fruit set, and as needed in times of stress. For small applications mix 1 Tbsp/gallon of water. Agitate while applying.
8741 1# $2.50; **8742** 4# $8.50

Compost Starters and Compost

Shipping weight is in parentheses (#).

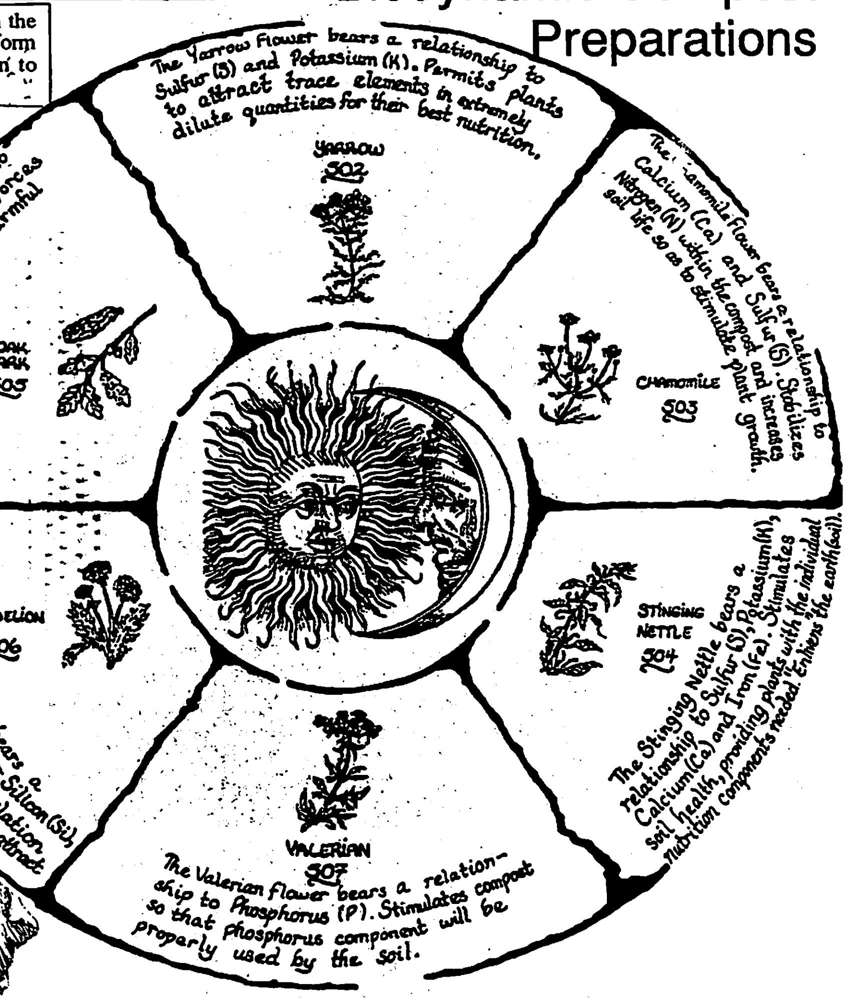
Biodynamic Compost Preparations

Rudolph Steiner designated these particular herbs/materials as those in the plant kingdom which held the particular elements in the best posssible form and/or ratio for use by the soil. For a good and readable introduction to Biodynamics, see the book #6508 A Biodynamic Farm by Hugh Lovel.

8751 BD Compost Starter An introduction to biodynamic composting. The starter contains six Biodynamic Compost Preparations, 502-507, plus stirred BD500 in sufficient quantity to treat up to 1½ tons of organic matter. The starter is designed for use by those just getting started in or curious about biodynamic farming. A Pfeiffer product.
8751 each (0#) $9.50

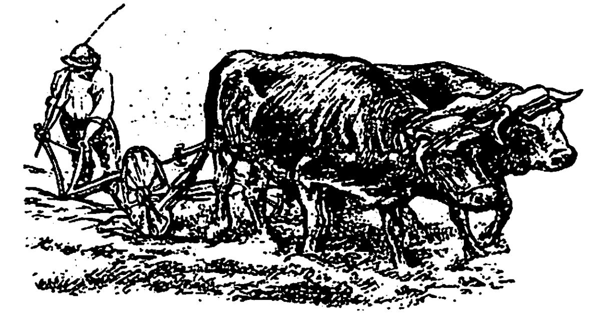
8752 BD Field Spray Concentrate For use just prior to turning in stubble or green manure, the spray contains BD preparations 502-507 with BD preparation 500 stirred in. Enough to treat 1 acre.
8752 each (0#) $17.00

8753 Biodynamic Compost Preparations We have made an arrangment with the Josephine Porter Institute for Applied Bio-Dynamics to have sets containing their preparations of BD 502-507 to be drop-shipped directly to our customers. These are meant for use within three weeks of receiving them so please indicate your desired shipping date. They come with recommendations about how to store and use.
8753 set (0#) $17.00



The Yarrow Flower bears a relationship to Sulfur (S) and Potassium (K). Permits plants to attract trace elements in extremely dilute quantities for their best nutrition.
YARROW
502
The Chamomile Flower bears a relationship to Calcium (Ca) and Sulfur (S). Stabilizes Nitrogen (N) within the compost and increases soil life so as to stimulate plant growth.
CHAMOMILE
503
The Stinging Nettle bears a relationship to Sulfur (S), Potassium (K), Calcium (Ca) and Iron (Fe). Stimulates soil health, providing plants with the individual nutrition components needed. "Enlivens" the earth (soil).
STINGING NETTLE
504
VALERIAN
507
The Valerian flower bears a relationship to Phosphorus (P). Stimulates compost so that Phosphorus component will be properly used by the soil.
DANDELION
506
The Dandelion flower bears a relationship to Silicic Acid or Silicon (Si) and Potassium (K). Stimulates relation between Si and K so that the Si can attract Cosmic forces to the soil.
OAK BARK
505
The Oak Bark bears a relationship to Calcium (Ca). Provides healing forces (or qualities) to combat harmful plant diseases.
Coast of Maine
ORGANIC PRODUCTS FOR THE GARDEN

8756-8758 Saltwater Farms Compost Accelerator Composting is the digestion of organic matter by microbial action, which frees stored energy and nutrients. Adding Compost Accelerator to your pile releases millions and billions and trillions of microbes looking for a good meal. Includes seaweed which adds needed amino acids and humates which chelate the freed nutrients to humus for storage and easy uptake. Compost Accelerator sprinkled on the garden or lawn adds microbes and improves health and fertility.
8756 12 oz. (1#) $7.00; **8757** 2# $12.00; **8758** 4# $20.00

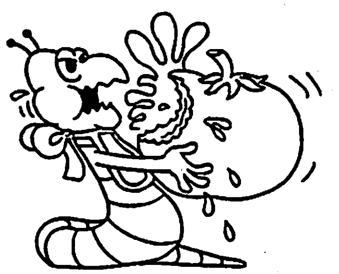


8761-8762 Amish Way Cow Manure Humus (1-1-1) A farm-made product from the Amish country of Pennsylvania. Blend of 35% cow manure with 65% organic matter, the end result of complete microbial digestion. Fussed over daily for 7-12 weeks and then subjected to 16 quality checks before being bagged. Has a neutral pH and good conductivity for cation exchange. Add to seed-starting mixture or to beds.
8761 40# bag $8.50; **8762** 10+ bags $7.50/each

8766-8767 Coast of Maine Penobscot Blend Compost (.8-.1-.1) a rich blend of salmon, mussels and wild blueberries composted and blended with sphagnum moss. Ideal for planting annuals, perennials, bulbs, for top-dressing lawns and as a fall mulch. The bag depicting Penobscot Bay makes it pretty enough to give as a gift. NEW!
8766 40# $7.50; **8767** 10+ $6.50/bag

Plant Protection & Pest Control

Shipping weight is in parentheses (#).



All these products, ranging from preventive measures such as bat houses, to organic last resorts such as copper or Colorado Potato Beetle Beater, are commonly used in organic farming and gardening. We welcome your suggestions about successful low-impact pest control methods or products. Use our new **#9310 Dustin-Mizer** or **#9314 Backpack** and **#9315 Pump Sprayers** to apply these products.

Caution: MOFGA *permits* certified growers to use copper products and sulfur for plant disease control but not as a substitute for *recommended* practices of crop rotation and proper sanitation. Copper in high concentrations is toxic to plants, invertebrates and microbes. A soil test is required for organic certification if you use copper more than once in 3 years.

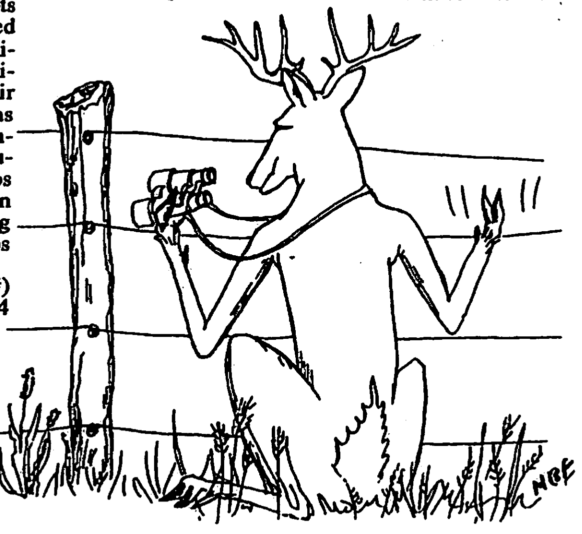
8801 Kocide 2000 Copper Hydroxide Copper is a strong broad-spectrum fungicide and should be used only for specific problems after all other attempts have failed. Kocide contains the equivalent of 35% metallic copper in micronized form, increasing coverage and penetration. Copper hydroxide will penetrate leaf tissue to kill bacterial and fungal spores, but may cause leaf damage. Superior adherence and coverage. Apply in a solution with Crocker's Fish Oil, (#8865-8867) spreader-sticker for better wetting and adhesion. Recommended rates of application ¾-3#/acre depending on crop treated.
8801 3# bag $20.00

8811-8813 Micronized Sulfur Sulfur is not water soluble; the smaller the particle the better it stays in suspension. These particles are less than five microns. To apply, thoroughly mix powder with water and keep the mix agitated constantly or apply as a powder with the Dustin-Mizer (#9310.) Used to control scab, powdery mildew and leafspot.
8811 1# shaker can $6.50 **8812** 4# bag $ 12.00; **8813** 30# bag $20.00

8821 T-22 Biological Fungicide Beneficial fungus *Trichoderma harzianum* colonizes plant roots and protects against fungus-borne root diseases including pythium, fusarium and rhizoctonia. Controls seed rot and damping off. Expensive, but effective. Use as an inoculant on potato seed pieces and cabbage, bean, cucumber, tomato, corn and other crop seeds. Application rates range from ½ oz/100# for potatoes to 4-10 oz/100# for seed, higher rates for larger seed.
8821 T-22 Planter Box 1# $35.00

8851-8853 Diatomaceous Earth Fine powder of microscopic diatom shells, the hard edges of the diatoms abrade the waxy surface of insects and slugs, dehydrating them. Sprinkle around the base of plants and seedlings to protect them from sow bugs, pill bugs, slugs and cabbage root fly or dust on the undersides of plants when they are wet from dew or freshly watered in cases of thrips damage. Its action is mechanical and affects both beneficials and pests, so use sparingly and only for specific problems. Excellent protection for stored grain and seed. DE comes in two grades: Pool filter grade, which is chemically treated and partially melted, is a respiratory hazard for mammals and *is not to be used* for insect control. Our natural grade does not pose a respiratory hazard and is the right type to use for insect control.
8851 1# $6.00; **8852** 4# $10.00 **8853** 50# $45.00

8856-8857 Green Screen Deer Repellent A packaged mixture of meat meal and cayenne pepper developed for use in fruit orchards around Benzonia, MI. Manufactured by Lakeshore Enterprises, a vocational program set up by Benzonia's local mental health agency. In a test conducted at Michigan State University, it proved an effective deterrent to deer foraging in test plots baited with cracked corn. Paul and Alison reported similar success in their fields. Available as powder to be sprinkled around succulent plants, bulbs and veggies, or in cloth bags to hang from trees, shrubs or plants.
8856 3lb. box (3#) $15.00; **8857** 24 bags (3#) $15.00

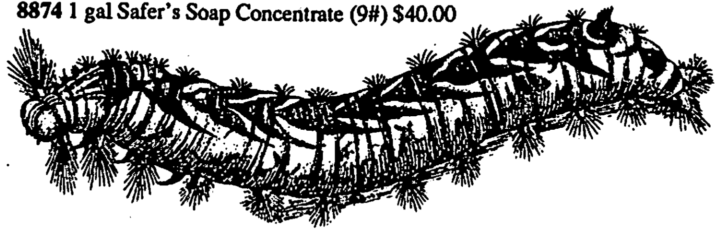


8861-8863 Garlic Barrier 100% garlic juice—just mix with water and spray to repel insects. An application when the cabbage moths appeared kept our broccoli stir-fries truly vegetarian. Several studies have suggested that garlic oil has fungicidal properties. One warning: this stuff stinks, is best mixed outdoors. The odor doesn't last and the taste of the vegetables is not affected. One pint covers 40,000 sq. feet. Gallon is more concentrated and covers 20 acres.
8861 1 pt. (1#) $7.50; **8862** 1 qt. (2#) $13.50 **8863** 1 gal. (9#) $72.00

8865-8867 Crocker's Fish Oil A dormant oil and spreader-sticker rich in nutrients and enhancers. It increases the absorption of foliar nutrients. Spraying with a mixture of garlic barrier and fish oil improves storage quality in onions; sprayed on garlic, the mixture controls thrips. Oregon orchardists have increased production using Crocker's Fish Oil as a dormant spray. Approved for use by Oregon Tilth. NEW!
8865 1 gal. (9#) $14.50 ; **8866** 5 gal. (50#) $65.00
8867 55 gal. (550#) $650.00

8869 Dormant Oil 96% canola oil concentrate, emulsifiable in water to control all stages of insects including egg clusters, mites and scales. Can be used indoors or out, on trees, fruits, vegetables and bedding plants. Recommended for aphids, apple red bugs, corn rootworms, earworms, leafminers, mealybugs and mites as well as others. The oil smothers the little beasts, clogging their intake ports. Mix at a rate of 4 Tsp/qt of water. NEW!
8869 24 oz. conc. (2#) $10.00

8871-8874 Insecticidal Soap Available in ready-to-use applicators or concentrated form. Biodegradable contact insecticide effectively controls mites, aphids, earwigs, lace bugs, leafhoppers, mealybugs, scales, spider mites, thrips, tent caterpillars and whiteflies. Fatty acids penetrate insect's soft outer membrane and disrupt normal functions. Mix the concentrate with alcohol to increase penetration. Hard water can reduce soap's effectiveness. Use 2 oz concentrate/gal water.
8871 12 oz. (1#) $3.00; **8872** 32 oz. (2#) $5.00;
8873 24 oz. conc. (2#) $8.00
8874 1 gal Safer's Soap Concentrate (9#) $40.00



8901-8902 DiPel *Bt* subsp. *kurstaki* is the active ingredient in this mixable powder. Apply in a solution with Crocker's Fish Oil (#8865-8867) spreader-sticker for better wetting and adhesion. ¼# size is garden strength, approx 4,320 IU per mg. 1# size is commercial strength, approx 32,000 IU/mg.
8901 4 oz. (0#) $8.00; **8902** Dry Flowable 1# $23.00

8906-8907 Liquid Bt For control of cabbage looper, cabbage worm, corn borer, tomato fruitworm and tomato hornworm. 8 oz. size is *Bt* var. *berliner* with a potency of 4000 IU/mg. Use 2-4 Tsp/gal. 1 qt size is *Bt* var. *kurstaki* with a potency of 8,800 IU/mg and is also effective on bagworms, gypsy moths, leafroller and spruce budworms. Rates from 1-4 pts/acre depending on pest and application method.
8906 8 oz. (0#) $10.00;
8907 1 qt. (0#) $18.00

8911-8913 Colorado Potato Beetle Beater A liquid concentrate produced by genetic engineering whose active ingredient is *Bt* var. *san diego.* The gene responsible for producing the Bt toxin is spliced into a bacterium which is more easily cultured than Bt. The altered bacteria produce the toxin as an encapsulated crystal, which is then used in Beetle Beater. Use of this product does not release living organisms. Use 1.5 oz/gal water. One gallon covers 40-100 sq ft. depending on the amount of foliage.
8911 8 oz. (0#) $13.00; **8912** 1 pt. (0#) $20.00; **8913** 1 gal. (9#) $71.50

8916-8917 Novador *Bt* var. *thuringiensis* subspecies *tenebrionis* The only non-genetically engineered Bt for Colorado Potato Beetles. Application rates vary from 1-4 qts/acre depending on the size of the larval population. Available in 2½ gallon and 6 gallon pails only.
8916 2½ gal. (22#) $80.00; **8917** 6 gal. (55#) $175.00

TOOLS AND SUPPLIES

Shipping weight is in parentheses (#).

We offer the best values available in seed-starting supplies, season extenders, tools and gardener care. We have trialed these items and use many regularly. Each has met our strict criteria for price, quality and durability. Many are the result of customer requests. We welcome your suggestions for further additions.

Seed-Starting Supplies

9001 Cedar Seedling Boxes Made in Maine from native cedar. These 6x9x3" seed-starting boxes offer a durable reusable alternative to Kord Paks for starting small lots of seedlings. Package of 5 boxes. Easy assembly, nails and instructions included.
9001 Pkg of 5 (1#) $7.50

9002 Cedar Plant Tray Maine-made from native cedar. 11x22x2¾" durable reuseable tray is a great alternative to plastic. Easy assembly, nails and instructions included.
9002 Each (1#) $5.50

9004 Pot Maker Recycle your Sunday paper into an alternative to peat pots with this handy wooden gadget. Simple to use: Wrap a strip of paper 3" wide and 9" long around the core, press, twist, and you have an instant paper pot that will hold up until you are ready to transplant.
9004 Each (0#) $13.00

9005-9007 Kord Paks Handy flats the same size as plastic "six-packs" but without the dividers. Made of recycled cardboard fiber and breathe much like clay pots. Ample space allows for healthy root development. 4 drain holes in each. At 6¾x5¼ x2¾", 6 nest in a 1020 Tray.
9005 Pkg. of 6 (1#) $2.00; **9006** 100 (5#) $24.00; **9007** 500 (30#) $90.00

Jiffy Pots Eliminate transplant shock! Peat Jiffy Pots can be put directly in the ground without disturbing seedlings. We stock three sizes.

2" Round Convenient for small seedlings and for folks with limited space.
9010 50 pots (1#) $3.00; **9011** case of 4000 (35#) $150.00

3" Round Good for tomatoes, brassicas and melons.
9012 50 pots(1#) $4.50; **9013** case of 1500 (30#) $100.00

3" Square Can be more tightly packed than round pots. Saves space and conserves moisture.
9014 36 pots (1#) $4.50; **9015** case of 1000 (30#) $90.00

Plug Flats Available in 3 sizes: 38, 50 or 98 round cells. Also known as Pro Trays. Fit into standard 1020 Trays for easy handling in the greenhouse. Made of lightweight black plastic with bottom drain holes.

	Cells	Width	Depth
9016-9017	38	2.19"	2.31"
9018-9019	50	1.88"	2.31"
9020-9021	98	1.38"	1.50"

9016, 9018, 9020 Pkg. of 3 (1#) $4.00;
9017, 9019, 9021 Box of 100 (30#) $85.00

"1020" Plant Trays and Domes

9022-9023 Plant Trays Plastic trays with drain holes, used to start seedlings in the greenhouse. 10½x21x2¼" and hold at least 18 3" jiffy pots. When the pots are damp we cram in several more.
9022 Pkg. of 3 (1#) $3.50; **9023** Box of 100 (30#) $67.00

9024-9025 Domes Fit over 1020 Trays to create a miniature greenhouse for seedlings. Keep soil from drying out, speed germination, and ensure good early growth.
9024 Pkg of 3 (2#) $7.00; **9025** Box of 50 (30#) $90.00

9026-9027 Heavy Duty Plant Tray These sturdy 11x22x2¾" plastic trays will last for years and are strong enough to hold 50 2" soil blocks without strain. Good for windowsills because they have no drain holes. Store out of sunlight when not in use; will fade and weaken if left in the sun over the summer.
9026 Each (1#) $6.00; **9027** 10 (10#) 55.00

9028-9029 Heavy Duty Dome Sturdy domes from the supplier of our heavy-duty plant trays. Will last for years with reasonable care.
9028 Each (1#) $3.00; **9029** 10 (10#) 25.00

9030-9031 Heavy Duty Plant Tray & Dome Combo
9030 Each (2#) $8.50; **9031** 10 (20#) 75.00

9036-9037 Seed Tray Heater Chrome steel frame holds seedling trays above the heating element which plugs directly into a regular 110 volt outlet. Raises soil temperature 10-15° and speeds germination and growth. Two sizes.
9036 15¼x21" (7#) $45.00; **9037** 17x38" (12#) $75.00

Ladbrooke Soil Blockers

The genuine article, made in England by Ladbrooke Ltd. There are many imitations on the market that can save you a few dollars, but the quality is not as good. The soil block system allows for easy transplanting and eliminates root spiraling.

9041 Mini 4 Blocker Makes four 2" soil blocks in one stroke.
9041 Each (0#) $27.50

9042 Micro 20 Blocker Makes 20 blocks per stroke in a 3x4" area. Use when your space is limited or when you want a large number of transplants. Micro-blocks are easier to warm, speeding germination. Can be inserted into 2" soil blocks to continue seedling growth.
9042 Each (0#) $22.50

9043 Inserts Square plastic inserts which can be installed into either 2" soil blocker to make the blocks ready to receive micro-blocks. Pry out the plastic nipple and screw in the inserts.
9043 Package of four with hardware (0#) $5.00

9044 Maxi 1 Blocker Makes one 4" block per stroke. Each block has a cube-shaped depression in the top to accomodate 2" blocks. Allows seedlings going out late to continue root growth and development. Especially good for tomatoes and peppers.
9044 Each (0#) $100.00

9045 Multi 12 Floor Blocker Makes 12 2" blocks at one time. Very helpful for large production. The long handle means no stoop work.
9045 Each (0#) $175.00

9046 Multi 20 Floor Blocker Makes 20 1½" blocks at one time. Great space-saver for starting lettuce and tender greens.
9046 Each (0#) $175.00

Potting Soil

9051-9053 Komplete Potting Mix (.2-1-.4, 1% Ca) A combination of humus-type peat and 20% compost. Uncompressed and ready to use, easy to handle, to start seeds in, and to keep moist. Screened at ½". Some applications may need lightening materials. Slightly acidic. Maine made, MOFGA approved.
9051 10 qt. (12#) $4.50; **9052** 60 qt. (60#) $14.00; **9053** 10+ bags $12.50

9056-9058 Komplete Light Potting Mix Living Acres creates a lighter potting mix by using sphagnum peat instead of humus peat and adding some perlite. Same 20% compost content as regular Komplete. Use if you want a more airy mix with less tendency to crust over. Maine made, MOFGA approved.
9056 10 qt. (9#) $4.50; **9057** 60 qt. (50#) $14.00; **9058** 10+ $12.50/bag

9061-9064 Cobscook Blend Potting Soil All-purpose growing medium blended from composted salmon, mussels, wild blueberries, sphagnum peat moss, grey granite, dolomitic lime and kelp meal. Light but with good water retention, drainage and aeration. Maine made, MOFGA approved.
9061 15# bag $4.50; **9062** 30# bag $7.00
9063 60# bag $14.00; **9064** 10+ $12.50/bag

9066 Peat Free Organic, biodegradable and environmentally sound substitute for peat moss. Compressed brick of coconut fibers that swells to eight or nine times its original size when placed in hot water. The fibers are quite short, but have excellent moisture retention capacity. Use in potting mixes or to add organic matter to your soil. Improves aeration and nutrient retention. Easy to store; three bricks make the equivalent of a half-bale of peat moss. Peat Free has been commended by the Wildlife Conservation Society as ecologically sustainable and supporting good conservation.
9066 3 bricks (2#) $7.00

A successful recipe for soil block mix (with thanks to Eliot Coleman): Mix 2 10 qt. buckets peat or Peat Free with 1/2 cup of lime and 2 cups of azomite. Add 2 buckets of sand, 2 more buckets of peat, 1 cup of rock phosphate, 1 cup of greensand, 1 cup of bloodmeal and 1 more cup of azomite. Mix well. Add 1 bucket of compost and 1 bucket of soil and mix again. Add water until the mixture is spongy but not soggy and start making blocks.

Garden Fabrics

9071-9072 Trellis Plus 7" reach-through mesh with a strand strength of 60 lb. for tomatoes, climbing beans, peas, cucumbers and luffas. Weave a strand of fence wire through the top for extra support. Will last for many years if you can avoid "the tangles"!
9071 5x30' (0#) $7.00 **9072** 5x120' (0#) $20.00

9073 Yard-Tek Weedshield Fabric Replaces Weed-X. Sturdy bonded polypropylene weed barrier for use in landscaping. Light at 1.25 oz/sq yd, allows water and air to pass through but smothers unwanted growth and retains soil moisture. We offer 3x25' and 3x100' but can special order other sizes; call for information. NEW!
9073 3x25' (1#) $7.00; **9074** 3x100' (4#) $16.00

9075 Yard-Tek Pro Heavy-duty fabric, strong enough to stand up to quack grass and other garden invaders. Thermally bonded, stiff like new blue jeans, 3.5 oz/sq yd. 3x100', other sizes available. NEW!
9075 3x100' (6#) $30.00

Season Extenders

9111-9113 Embossed Black Plastic Mulch Eliminates pressure from weed competition and increases soil temperatures. Put down a few weeks before planting to allow the soil to soak up some heat. Embossed texture increases strength and minimizes tearing. Not very aesthetic but gets the job done. 1.25 mil. 4' wide.
9111 50' (1#) $4.50; **9112** 250' (5#) $23.00; **9113** 2400' (40#) $130.00

9116-9118 IRT 100 Mulch Has the weed-suppressing qualities of black plastic and lets the infra-red light through to warm the soil beneath. Commercial grower Alan LePage wrote from his Vermont hilltop, "We're having a great season—thanks to IRT plastic! More eggplants, okra and corn than we've ever had. It made such a big difference this year." Alan also grows sweet potatoes on IRT under row cover. 1.0 mil. 4' wide.
9116 50' (1#) $4.50; **9117** 250' (5#) $23.00; **9118** 2400' (40#) $125.00

9121-9128 Pro-17 Row Cover Spunbonded polypropylene row cover, 0.5oz/sq yd. We prefer it to Reemay for its soft texture, flexiblity and resilience. Light enough to float on top of plants, but sturdy enough to provide protection against wind and bugs. It resisted abrasion from the thistly artichoke flower and the pouncing of the kitten on the pepper plants. Transmits air, water and 85% of sunlight. Provides 4° of frost protection. Available in three widths. UV stabilized for extra durability.
9121-9122 6' wide.
9121 50' (1#) $9.50; **9122** 2550' (60#) $265.00;
9123-9124 83" wide.
9123 250' (5#) $30.00; **9124** 1000' (44#) $115.00
9126-9128 10' wide.
9126 50' (1#) $13.00; **9127** 250' (5#) $60.00; **9128** 1000' (44#)$180.00

9130-9134 Elmer Plantex-C An unbleached hand-picked cotton row cover, compostable, yet will give several years use with proper care. Similar in weight and weave to cheesecloth, it provides a few degrees of frost protection, keeps insects from the plants and slows evaporation, decreasing the need for irrigation. Light enough to be used without support except in very wet conditions. The edges are treated with sunflower oil to prevent premature rotting. It may be ordered without treatment if desired. Available in 5x30' introductory pack (edges are not treated), 5x300', 7x100', 7x300', 11x100'. NEW!
9130 5x30 (1#) $16.00; **9131** 5x300 (10#) $110.00; **9132** 7x100 (5#) $50.00; **9133** 7x300 (13#) $150.00; **9134** 11x100' (8#) $75.00

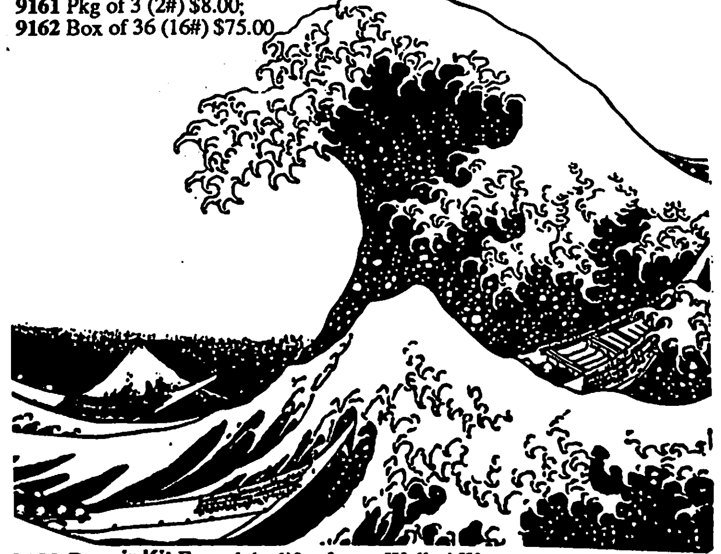
9136-9137 Typar Spun-bonded polypropylene is very durable, yet will still let in light and water. Used commercially as a winter row cover for strawberries. Our experience suggests a useful life of two to three years. 1.25oz/ sq yd.
9136 15x50' (2#) $42.50; **9137** 15x100' (5#)$85.00

9141-9143 Clear Slitted Plastic Row Cover Applied over wire hoops to form small tunnels, creating a greenhouse environment to promote the growth of heat-loving plants. Self-venting on hot days. Offers a few degrees of frost protection. Can be reused with care. 1.1 mil. 6' wide.
9141 50' (2#) $8.00; **9142** 250' (10#) $35.00; **9143** 1000' (40#) $100.00

9146-9147 Galvanized Wire Hoops For building tunnels with Pro-17, slitted plastic or other row covers. Most effective if spaced at 5' between hoops. 10 gauge wire, 76" long.
9146 Pkg of 20 (8#) $20.00; **9147** Pkg of 100 (35#) $70.00

9151-9153 Earth Staples The garden is full of rocks except when you need one to anchor the row cover. 6" galvanized wire staples neatly hold down landscape fabrics of all kinds. They kept our black plastic weed barrier in place all season.
9151 25 (1#) $2.50; **9152** 100 (5#) $9.00; **9153** 1000 (50#) $70.00

9161-9162 Wall o' Water Season extender for individual plants. Offers protection to 16°. Surrounds plant with plastic teepee 18" high, 18" across. Holds 3 gallons of water which absorb heat during day and release it at night to moderate temperature extremes. Put out two weeks ahead of transplants to warm soil.
9161 Pkg of 3 (2#) $8.00;
9162 Box of 36 (16#) $75.00

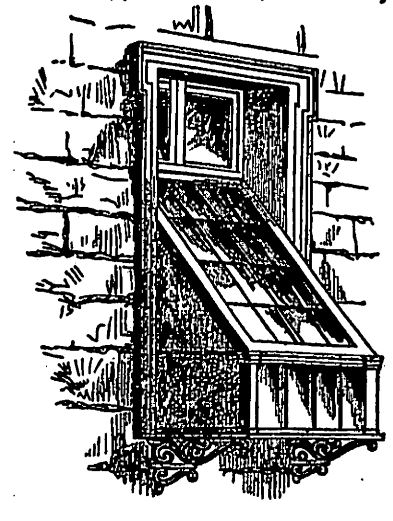


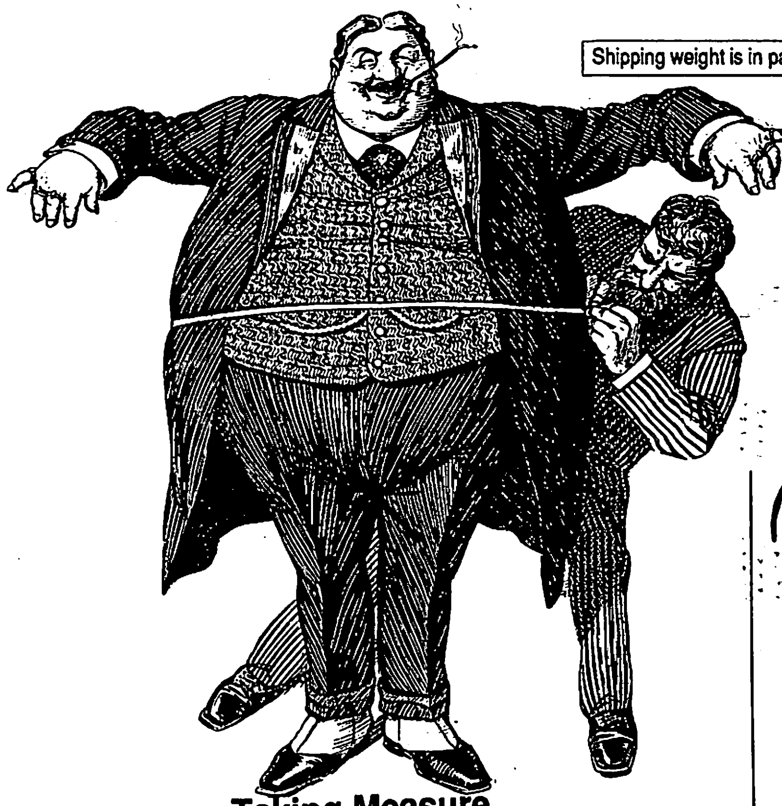
9163 Repair Kit Extend the life of your Wall o' Water.
9163 Each (0#) $1.25

9164 Saylor Caps Tests in PA have shown increased yields and earlier ripening for tomatoes grown in these solar incubators. Tomatoes can be planted up to six weeks earlier. A galvanized steel frame supports a plastic bag of water to hold in the sun's warmth, protecting plants from frost and promoting faster growth. Can be used as a cloche for squashes and other tender vines; remove once danger of frost passes. Boxes of 25.
9164 25 (25#) $75.00

9165-9166 Greenhouse Umbrella A clear plastic plant shelter with an uncanny resemblance to the mod plastic umbrellas of '60s London and Carnaby St. In fact, as its name suggests, it is a sturdy portable greenhouse 42" high by 40" across built on an umbrella frame so that it collapses for easy storage. Umbrella "handle" is a spike which stabs well into the ground. We used ours for eggplant in its second season of trials. When the two plants inside got too big, we removed the umbrella and they outgrew and outproduced our eggplants under row cover.
9165 Each (2#) $13.00; **9166** Pkg of 5 (10#) $55.00

9176 Solarvent Automated Window Opener Heat-sensitive arm automatically opens and closes cold frame windows. When the temperature inside the cold frame reaches 68°, the arm begins raising the window. Fully open ($7^{1}/_{2}$") at 75°, fully closed at 65°. Has a counter-balance spring which increases the lifting capacity. The Solarvent comes with plans to build your own cold frame.
9176 each (3#) $42.50 **Supplies Limited, order early.**





Taking Measure

9201-9202 Cook's Consulting Soil Testing Services A healthy well-balanced soil is the heart of good agriculture. We offer two mail-in soil test kits containing directions for sampling, a bag for the sample, and a mailing envelope. Our price includes analysis and recommendations for making organic soil improvements. Choose between two extensive tests. The Agricultural Soils Kit tests for pH, nitrogen, phosphorus, potassium, organic matter, soil texture, calcium, magnesium, sulfate, base saturation, cation exchange capacity (CEC) and aluminum. The Deluxe Agricultural Kit tests all the above and manganese, iron, chloride, copper, and zinc.
9201 Ag Soil Test (0#) $17.00; **9202** Deluxe Ag Soil Test (0#) $25.00

9203 Soil Analyzer Combination pH and fertility meter. To prepare the soil for a reading, scrape away the top two inches, work the next five inches removing any stones, twigs and roots, breaking up any large clumps; wet thoroughly, preferably with rain water or distilled water. Set meter for the desired reading, clean the probes and plunge them into the sample. Wait one minute for a pH reading, the fertility reading takes only 5 seconds. The fertility analyzer requires one AA battery. NEW!
9203 Each (0#) $27.50

9205 Garden pH Test Kit pH is the key to plants' ability to take up nutrients. An inexpensive method for approximating your soil's pH and determining amount of aragonite or lime needed to redress imbalances. Includes instructions and materials for 8 tests.
9205 Each (0#) $5.00

9206 pH Meter If you find the reading from a pH test slightly muddied, a clearer answer can be had by using a meter. Prepare a slightly moistened spot in the soil you wish to test, free of rocks and other large matter. Activate the probe with sandpaper, and in a few minutes the needle registers soil pH precisely.
9206 Each (0#) $7.50

9207 Garden Soil Test Kit Contains reagents for approximately 8 tests each of soil pH, nitrogen, phosphorus and potassium. Includes instructions, test tubes, and information booklet.
9207 Each (0#) $15.00

9211 Tru-Chek Rain Gauge Accurate wedge measures up to 6" of rainfall. Measures increments as fine as 0.01". Comes with hardware for mounting on a post.
9211 Each (0#) $6.50

9212 Taylor Max-Min Thermometer Records the high and low temperatures since the last setting. Especially useful for monitoring the greenhouse or for calculating degree days. Gives reliable data for bragging about temperature extremes. Easy-to-read scale measures from -40° to 130°.
9212 each (0#) $21.00

9221 Taylor Soil Thermometer 5" stainless steel probe to monitor soil temperatures at planting depth to gauge the optimum time for planting. Avoid damping-off and other temperature-related problems.
9221 each (0#) $13.00

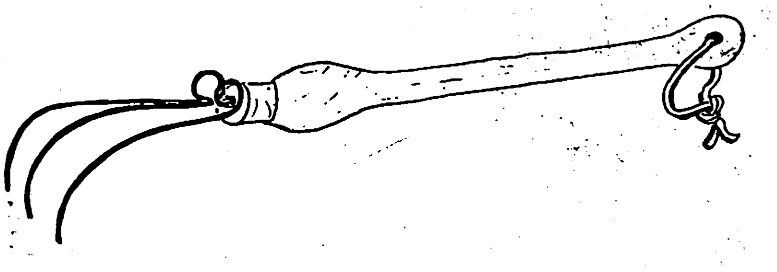
9222 Reotemp Compost Thermometer 20" stainless steel probe, this bi-metal thermometer has a 2" dial registering from 0-200°. Virtually indestructible.
9222 each (0#) $25.00

Tools

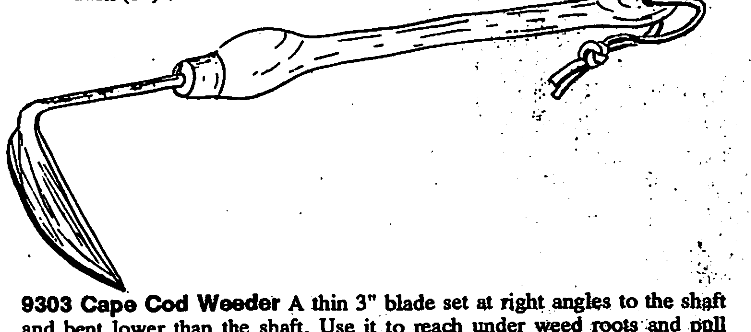
9301 Trowel A heavy duty trowel from Garden Tools of Maine, the blade is $5^{3}/_{4}$" long by 3" wide with a $1^{1}/_{4}$" deep arc. Blade calibrated in inches to judge planting depth. Stands a lot of use and ferocious prying.
9301 Each (1#) $13.00

Snow & Nealy Tools of Maine

Forged in the brick furnaces of Bangor, ME, the shank of each tool is serrated before being inserted into the wooden handle, bonded with epoxy and clamped into place with a brass ferrule. Handles are 9" long for balance and comfort.

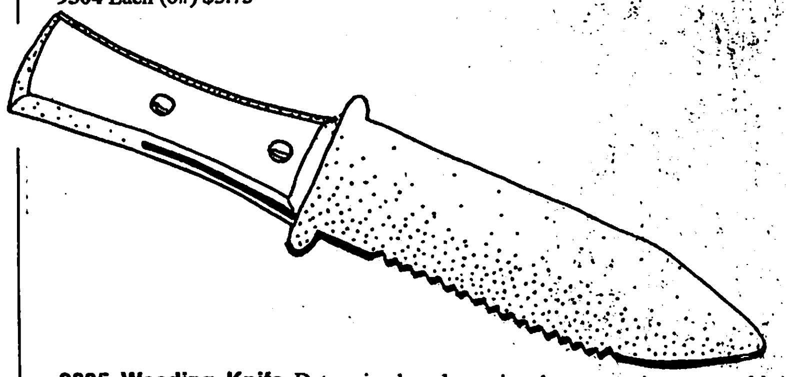


9302 Claw Three tines of spring steel for cultivating around plants and clawing up recalcitrant weeds. If Caliban had had one of these to dig his pignuts he might have been a happier fellow.
9302 Each (1#) $13.00



9303 Cape Cod Weeder A thin 3" blade set at right angles to the shaft and bent lower than the shaft. Use it to reach under weed roots and pull them toward you, dislodging them. Overall length $13^{1}/_{2}$".
9303 Each (1#) $13.00

9304 Widger Indispensable for dividing and separating seedlings, digging them out of plug flats. Very handy for working with small plants in tight places. Amy LeBlanc said we had to carry these and we're glad we do. Stainless steel. $6^{1}/_{2}$" long with a $^{3}/_{4}$" end and a $^{1}/_{4}$" end.
9304 Each (0#) $3.75



9305 Weeding Knife Determined males using heavy equipment could bend this digging tool, but no amount of prying in the garden will. Thick concave steel blade with bevelled edges tapering to a point, one semi-sharp smooth edge and one serrated edge. The blade extends $2^{1}/_{2}$" into the wooden handle to which it is securely riveted. Our favorite handtool, still in good condition after 8 years of hard use. Originally designed to extricate plants for bonsai from Japan's mountains, this is the perfect tool for prying out taprooted weeds and knocking soil from sods and weed clumps. Good for use as a narrow trowel, for general cultivating and sawing small roots or heavy stems. Not as sharp as a knife or a saw, but it gets the job done. Susan says, "When I go out into the garden, I put my weeding knife in one pocket and my pruners in the other and am equipped for most eventualities." Comes with a black vinyl sheath with a belt loop. $6^{1}/_{2}$" blade, $11^{3}/_{4}$" long overall. NEW!
9305 Each (1#) $21.00

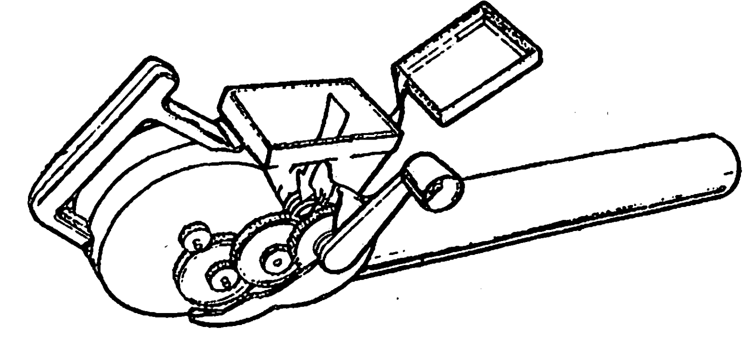
9306 E-Z Digger Everybody raves about this tool. Staffer Carol Doyle used hers to hack parsnips out of the frozen spring ground. MOFGA executive director Russell Libby had to replace his after the first was pressed into service as a mortar trowel. Plow-shaped design features a 7" long 3" wide convex blade tapering to a pointed end. Great for removing deep roots and sod and for cultivating soil. The edge is used for light surface scraping and redistribution of the soil. Made in Korea from a traditional Korean design.
9306 Each (1#) $9.50

9307 Garden Rake I thought all garden rakes were pretty much alike until I saw this big one. Hefting it, it seemed too heavy for easy use. Turns out it's balanced so the weight translates into more power and smoother glide in the seed bed you're preparing, not at all like tugging at the soil with a flimsy tool. I've used it only two seasons, but it seems like it will last a lifetime. Rake is steel, forged in Brazil, 17" long with 16 2½" long teeth. Ash handle made in Tennessee.
9307 Each (8#) $25.00

9308 Digging Fork A classic solid four-tined fork made by Samuel Parks in England. The forged steel shaft comes high up the handle for ruggedness. Digging forks disturb the soil less than spades and are great for shaking soil out of weed clumps. Split wood D-ring handle for comfortable digging. Overall length 43" with 31½" handle.
9308 Each (5#) $43.00

9309 Soil Sieve Set A 12" diameter stainless steel frame with 3 interchangeable screens, of 4, 5 and 10 mesh/inch. Use to prepare potting mix and seed beds, or to screen compost before adding it to the garden. Roberta took one look and said, "Oh! I would buy one of those. It would be very good for seed cleaning." The screens included would be good for beans, peas and larger seed and it could be modified to clean smaller seed as well. NEW!
9309 Set (1#) $20.00

9310 Dustin-Mizer Dusting plants spreads insecticides and fungicides efficiently, leaving the coverage on the leaves, not absorbed into the plant. But spreading dust evenly can be a challenge. No longer. The Dustin-Mizer creates a high-volume stream of air, spreading dust evenly and thoroughly; the deflector shield allows one to reach under the plant and dust leaf undersides as well. High impact ABS plastic, holds up to 1 lb. Use with our sulfur dust, diatomaceous earth and other light powders. NEW!
9310 Each (3#) $32.50

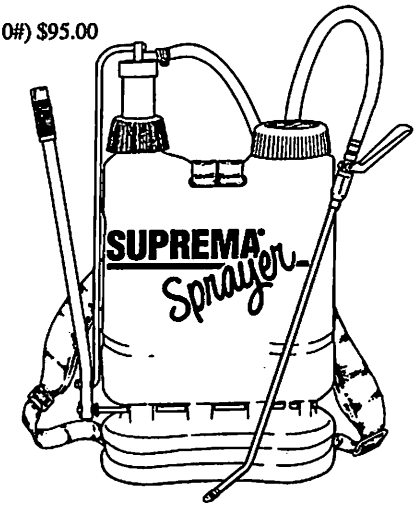


When the spray has to stay, dust is the way.

9311 Watering Can Heavy duty 2½ gallon hot-dipped galvanized Haws watering can, made in England. Not a flimsy imitation. Fixed handle on top and long spout make pouring well-balanced and easy. Welded bar spout support. Detachable brass-faced rose rains a shower that doesn't wash away soil or seedlings. Once you've used a good watering can, you won't go back to pouring from jugs and pails.
9311 Each (5#) $45.00

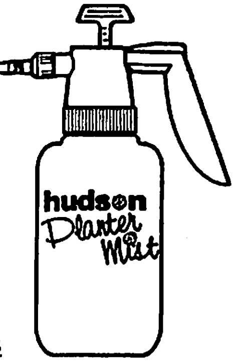
9312 Eco-Spout Turns used plastic containers into watering cans. Adapter fits 1-gallon and half-gallon plastic jugs, and 2-liter soda bottles. When my grandson comes to visit, before saying hello, he grabs the bottle with the Eco-Spout and races out to water the garden. Comes with both a spout and sprinkler attachment which snap on to the adapter. Reuse, recycle and rejoice.
9312 Each (0#) $3.50

9314 Backpack Sprayer Hudson's professional model has a 4-gallon capacity sturdy polypropylene tank and separate pressure tank. 5-year limited warranty. Padded non-absorbent carrying system with waist strap. Can be set up for either right- or left-hand use. Pressures up to 90 psi enable spray to reach high into orchard trees. Nickel-plated brass fittings and heavy-duty chemical-resistant hoses for long life and easy use. Made in the USA.
9314 Each (10#) $95.00



9315 Hand-held Sprayer 2.75-gallon tank makes this Hudson top-of-the-line sprayer ideal for heavy use in a small farm setting. A few strokes build up working pressure and the occasional pump keeps the spray going. Heavy-duty pressure-molded polyethylene tank is lightweight and extremely durable. 10-year limited warranty. Made in the USA.
9315 Each (5#) $47.50

9316 Planter Mist This 1.25-liter pump sprayer is an excellent choice for indoor or outdoor use. A few strokes of the pump build up enough pressure to mist your seedlings and still keep the cat off the table. We had a lot of fun testing this in the office and it held its pressure for days. Adjusts easily from a fine mist to a spray to a thin stream, and the nozzle unscrews for cleaning. The opening is large enough to fill easily and the body is sturdy polyethylene. Made in China.
9316 Each (1#) #9.50



Flame Weeders

Flame weeding has been popular in Europe for over 50 years and was used in this country in corn and cotton fields before the introduction of herbicides. A brief burst from the 2000' flame heats the sap in the cell walls causing them to burst and collapse; the plant wilts and dies a few days later. Especially effective on young annual and perennial weeds, repeated flamings of persistent weeds eventually so discourages them that they pull up roots and die. The flame can also be used for melting ice, burning out web worms and singeing the tops of meringues and crèmes brûlées.

9318 Backpack Weeder Aluminum frame backpack comes with 3-gallon fuel cylinder, 10' hose, regulator, 33" wand rated at 400,000 BTU/hr.
9318 Kit (0#) $230.00

9319 Weed Flamer Wand If you don't plan on walking vast fields while flame-weeding, or if you already own a gas grill. The same 33" wand, 10' hose and regulator as the Backpack weeder to attach to your 3-gallon propane tank.
9319 Each (0#) $80.00

9320 Squeeze Valve Adjustable valve allows you to set a minimal flow which increases as you squeeze the handle. Keep a pilot flame burning when moving from row to row. A good addition to either the backpack weeder or the wand.
9320 Each (0#) $37.50

Earthway

9321 Earthway Vegetable Seeder In one continuous operation the seeder opens the soil, spaces, plants and covers the seed, packs the soil, and marks the next row. Reliable performer for the large garden or small farm. Includes 6 seed plates: carrots, beans, corn, peas, radish, and beets. A real time-saver, especially for corn, beans and peas.
9321 Each (0#) $80.00

9322 Fertilizer Attachment Easily attaches to Earthway Seeder for side-dressing plants. Fully adjustable to control application of all granulated fertilizers. Reduces the amount of fertilizer spread, quickly paying for itself.
9322 Each (0#) $32.50

9323 Optional Seed Plates Make your Earthway Seeder even more versatile. Package of five plates: brassicas; cucumbers; popcorn; lima beans; and rutabaga and lightly seeding lettuce, carrots and turnip.
9323 Pkg of 5 (0#) $16.00

9324 Earthway Broadcast Spreader Spread seed or fertilizer evenly and accurately. This spreader has a zippered canvas bag and shoulder strap and, most importantly, an enclosed gear box to keep dirt out of the die-cast zinc gears.
9324 Each (0#) $45.00

From The Scythe Book (#6665) by David Tresemer.

> Three scythes at harvest whizzing in a row from three lusty
> angels with shirts bagged out at their waists;
> *Song of Myself*
> Leaves of Grass 1855

Marugg Scythes

9331-9333 Scythe Kits Complete kit contains a hammered Austrian Swan pattern blade, a hickory wood snath (either curved or straight) or an adjustable metal curved snath, and whetstone with belt-loop carrying case for sharpening during mowing. This scythe is wonderfully balanced and a pleasure to use. Comes with a set of thorough instructions and a recommendation from Wendell Berry: "… in my opinion, it is a better tool because it is light, it handles gracefully and comfortably, even on steep ground…" Available with either a 26" grass mowing blade or a 20" bush blade. If you would like to know more about scythes or need to convince your partner about the usefulness of the scythe, check out The Scythe Book by David Tresemer (#6665) in the book section. We carry the complete kit in stock for pickup customers. Specify Grass or Bush Blade
9331 **Curved Wooden Snath Scythe Kit** (0#) $87.50
9332 **Straight Wooden Snath Scythe Kit** (0#) $86.00
9333 **Adjustable Metal Snath Scythe Kit** (0#) $92.00

9335-9336 Wooden Snath Just the snath and ring. In two styles.
9335 Curved Snath (5#) $29.50; 9336 Straight Snath (5#) $27.25;

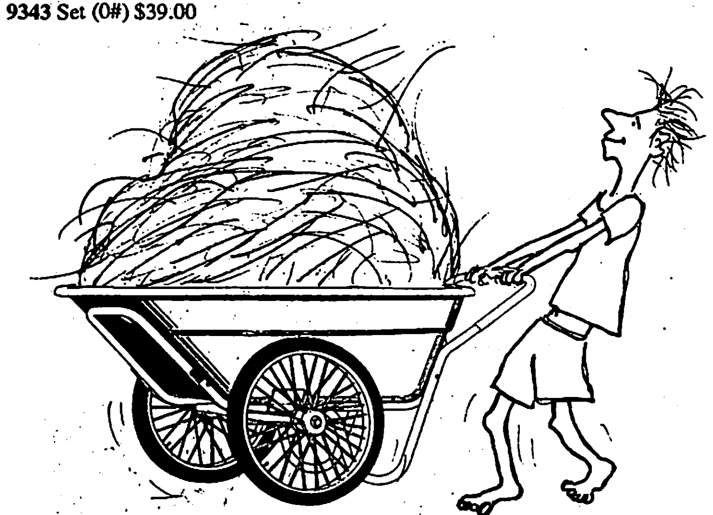
9337 Metal Adjustable Snath Lighter than our wooden snaths. Upper and lower handles adjust to your height and comfort.
9337 (5#) $34.00

9338-9339 Scythe Blade If you already have a scythe and would like an additional blade, you can get either the 26" mowing blade or the 20" bush blade by itself.
9338 Grass Scythe Blade (0#) $56.00; 9339 Bush Scythe Blade (0#) $56.00

9340 Scythe Ring
9340 Each (0#) $6.50

9341-9342 Whetstone and Holder Natural Austrian stone, to keep the edge on while mowing. Holder is a plastic case which clips to your belt and holds water to keep the stone ready for use.
9341 Whetstone (0#) $7.50; 9342 Holder (0#) $7.50

9343 Hammer and Anvil Set For those long drawn-out evenings between mowings. Keeps blade tempered and repairs nicks and cracks in cutting edge.
9343 Set (0#) $39.00



9346-9347 Smart Cart We think the Smart Cart is the best garden cart on the market today. The 7 cu ft pan is made of high-density linear polyethylene impregnated with UV inhibitor to protect from sun damage. The pan easily snaps in and out of the tubular aluminum alloy carriage and has no bolt holes so is completely leakproof. Staffer Tom Levesque bought his so that he would have a bathtub. The cart weighs only 35 lbs and has a central balance point so that even when fully loaded it is easy to pull. Doesn't tip over backward. Fedco Trees now owns two Smart Carts, especially for hauling huge loads of wet sawdust. When tilted just right the loaded carts "feel almost empty and they dump real easy, like a dumptruck." We frequently borrow them from Trees. The manufacturer in Windham, ME offers a lifetime warranty. Spare parts are available from us. Assembly takes about half an hour and is a pleasure thanks to the fine quality manufacturing and machining.

Choice of two wheel types: solid rims with 4" wide, 16.6" diameter tires, or spoked rims with 2" wide, 20" diameter tires. The solid rims, rated for 600 pounds, are better for hauling heavy loads over uneven terrain. The spoked wheels, rated for 400 pounds, roll more easily on smooth and level surfaces. The cart will be shipped directly to you from the manufacturer.
9346 Solid rim (0#) $230.00; 9347 Spoked rim (0#) $230.00

Keeping Control

9351 Bird-Scaring Balloon Invented and widely used in Japan, this balloon has multi-colored stripes around a metallic eye. Successfully tested against some of Maine's toughest crows! If you've got too much corn to cover with row cover, this is a good alternative. Most effective if moved around the garden from time to time. Protects a 15-20' radius.
9351 Each (0#) $6.00

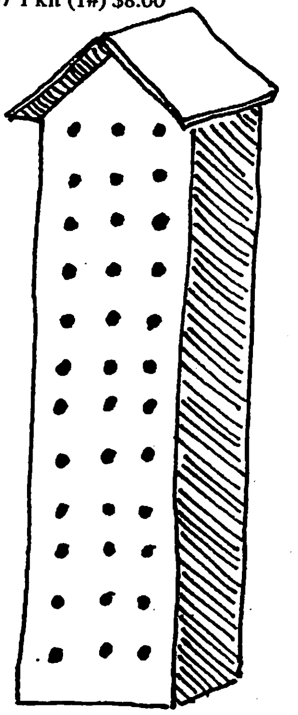
9352 Birdscare Flash Tape Silver and red metalized 7/16"x250' plastic tape is a cost-effective method to protect crops against bird damage. Suspend tape in a loose spiral above the crop. Wind causes tape to flash and flicker resembling fire. Very effective against flocking birds and crows, less so against robins, sparrows and their ilk. Don't apply too early or birds may get accustomed to tape.
9352 Each (0#) $2.50

9353 Bird-Scaring Balloon and Birdscare Flash Tape Combo Keep the birds off balance.
9353 Bird-Scaring Balloon and Flash Tape (0#) $7.50

9356 Bat House This sturdy rustic pine bat house comes fully assembled and ready to mount. Designed according to the latest ideas in bat-house architecture with a single ¾x6½x17½" dwelling area. A cozy space for the bats to spend their days resting after a long night of eating your mosquitoes. For more information on bats and how to attract them, write to Bat Conservation International, PO Box 162603, Austin, TX 78716.
9356 1 house (1#) $14.00

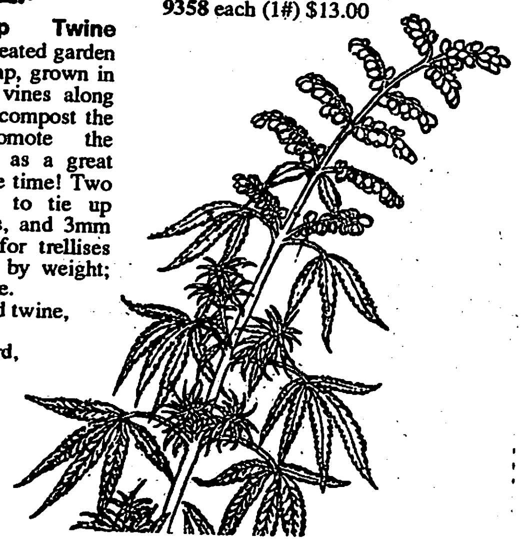
GENUINE RAW
PERUVIAN
GUANO

9357 Bird House Kit Attract Eastern Bluebirds or Tree Swallows to your yard or garden. Bluebirds are voracious insect eaters, but choosy about nesting areas, preferring a hollow tree at the edge of a field. Development has destroyed many nesting areas, and starlings, a non-native species, migrate here a few weeks before the bluebirds arrive and often take the best spots. The opening on this bird house is too small for the starlings. Designed according to the specifications and recommendations of the Maine Audubon Society and the Cornell Lab of Ornithology, with a clean-out door and a predator-control opening. Requires assembly. Nails and instructions included.
9357 1 kit (1#) $8.00



9358 Orchard Mason Bee Hotel Ubiquitous and vigorous pollinators, small solitary black Orchard Mason Bees (*Osmia lignaria lignaria* in the East) can be found across the United States and Canada. They emerge from hibernation after the temperature reaches 50° for several days. Males emerge before the females, for whom they lie in wait. Females emerge, tumble to the ground for a brief frolic, then clean themselves off and begin busily gathering pollen from the flowering shrubs in their neighborhood. It "flits nervously from tree to tree as it forages" (from The Orchard Mason Bee by Brian L. Griffin #7286 in the Fedco Trees catalog), never flying much more than several hundred feet from its nesting site. Orchard Mason Bees do not excavate their own nesting sites, although they do extensive renovations once they find a home. The Orchard Mason Bee Hotel is a Douglas fir block drilled with 39 mason bee cells. Bees lay several eggs in each cell. Hanging these blocks in your orchard or on the side of your home will offer an attractive nesting site for this prolific pollinator.
9358 each (1#) $13.00

9408-9409 Hemp Twine You've asked for untreated garden twine. Here it is: hemp, grown in Romania. Cut down vines along with their twine and compost the whole tangle. Promote the rediscovery of hemp as a great fiber plant at the same time! Two sizes, 1.5mm twine, to tie up plants and mark rows, and 3mm cord, strong enough for trellises and hop fences. Sold by weight; lengths are approximate.
9408 1.5mm unfinished twine, 200g/550' (0#) $5.00
9409 3mm 3-strand cord, 500g/450' (1#) $10.00



Who's Who in the Garden World

9411-9412 Wooden Pot Labels Untreated 5x⅝" wooden sticks for labeling seedlings. Made in Maine.
9411 Pkg of 50 (0#) $2.00; **9412** Box of 1000 (3#) $21.50

9416-9417 Wooden Garden Stakes 12x1⅛x⅛". Large enough to label rows in the garden. Untreated and made in Maine.
9416 Pkg of 25 (0#) $3.00; **9417** Box of 250 (3#) $27.50

9418-9419 Treated Wooden Garden Stakes We used these stakes, treated with non-toxic white paint, in our trials this year. At the end of the summer, the names stood out clearly and the stakes showed little deterioration where they had been in contact with the soil. 12x1⅛x⅛".
9418 Pkg of 25 (0#) $3.50; **9419** Box of 250 (3#) $30.00

9421-9422 Wooden Field Stakes 18x1⅛x¼". You won't lose this variety marker in the undergrowth. Longer and thicker than the garden stakes, these untreated field markers are easy to spot in the thickest bean bushes. Made in Maine.
9421 Pkg of 25 (1#) $7.50; **9422** Pkg of 100 (5#) $27.50

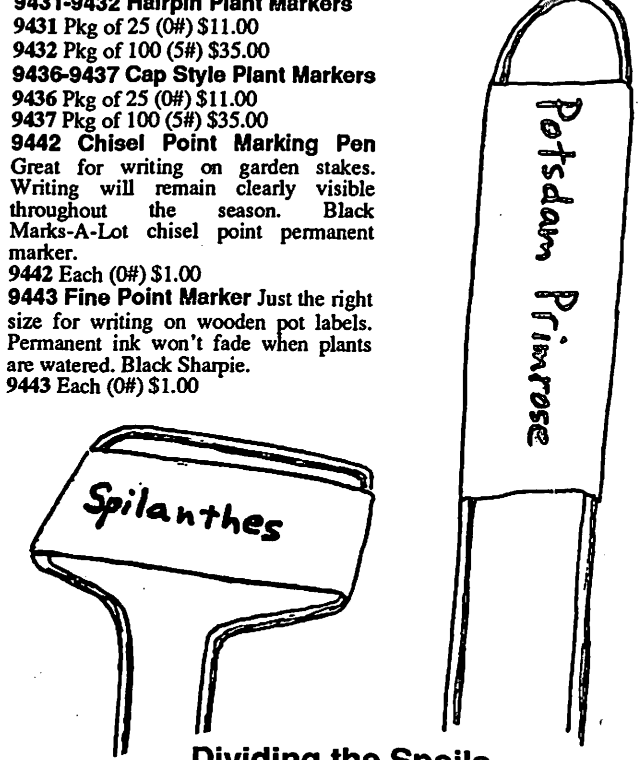
9431-9437 Plant Markers Zinc-coated nameplates on galvanized steel wire provide permanent outdoor labeling. Available in two styles: the hairpin, a 12" tall slender marker with an extra long ⅞"x3¼" nameplate or the basic cap style marker, 10½" tall with a ⅞"x2½" nameplate. Comes with marking pencil. Now when your friends admire the spilanthes, you'll know what it is.

9431-9432 Hairpin Plant Markers
9431 Pkg of 25 (0#) $11.00
9432 Pkg of 100 (5#) $35.00

9436-9437 Cap Style Plant Markers
9436 Pkg of 25 (0#) $11.00
9437 Pkg of 100 (5#) $35.00

9442 Chisel Point Marking Pen Great for writing on garden stakes. Writing will remain clearly visible throughout the season. Black Marks-A-Lot chisel point permanent marker.
9442 Each (0#) $1.00

9443 Fine Point Marker Just the right size for writing on wooden pot labels. Permanent ink won't fade when plants are watered. Black Sharpie.
9443 Each (0#) $1.00



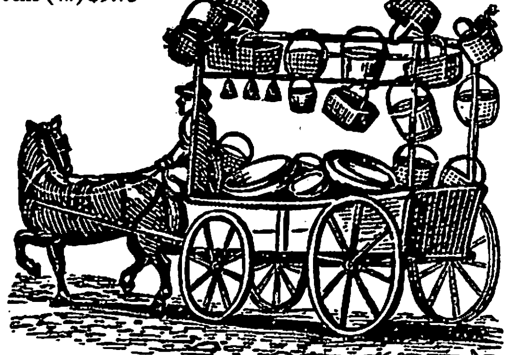
Dividing the Spoils

9501-9502 Seed Envelopes Our reclosable seed envelopes, plain with no logo. Use them for seed saving, repacking bulk seed orders or tucking away small objects. Two sizes.
9501 2x4" Pkg of 10 (0#) 75¢; **9502** 3x5½" Pkg of 10 (0#) $1.00

9506-9508 Potato Bags For storing or marketing your own spuds. Heavy paper bags with a mesh vent in front to avoid moisture build-up.
9506 5# bag (0#) 25¢; **9507** 20# bag (0#) 45¢; **9508** 50# bag (0#) 70¢

9509 Burlap Bags Burlap bags are heavy duty, untreated and hold 50 lbs of potatoes.
9509 Each (0#) $1.25

9510-9512 Harvest Baskets Old-time wooden lath and wire baskets in bushel, half-bushel and peck sizes. Bushels and half-bushels have two wire loops for handles, the peck has a wire bail with a wooden handle. Bundle of 3 baskets. NEW!
9510 bushels (5#) $12.75; **951** ½-bushels (5#) $11.25
9512 pecks (4#) $9.75



9513 Bag Twister Tool Good way to close up potato bags. Scrunch the top closed and wrap a wire tie around it. Insert hook into loops on the tie and twist. We call this tool a "twizzler" in our warehouses, but doubt that the term is widely used. Ties sold separately.
9513 Each (0#) $12.00

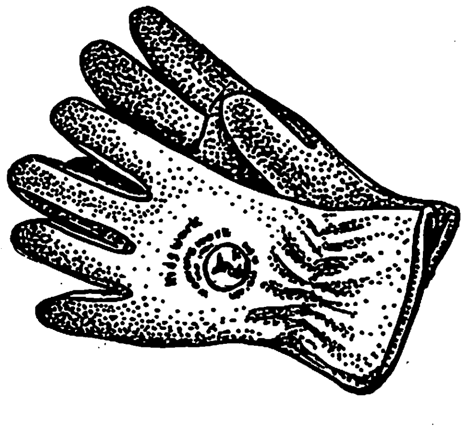
9514 Wire Ties For use with Bag Twister Tool. 5½" long.
9514 Pkg of 100 (0#) $1.50

9516 Rubber Bands 1# pkg. These are #64 size, ¼x3½", approximately 460 per lb. Useful for bunching broccoli, dried flowers, carrots, beets, scallions for market.
9516 Each (1#) $4.00

Aid and Comfort

9601-9603 Womanswork Pigskin/Cowhide Gloves for Women My ideal gloves, Susan writes, would be warm and have a comfortable fit. They'd protect my hands working with firewood, rocks, roses and barbed wire, and be soft enough for driving. They'd cost very little and last forever. Womanswork Gloves come close to that ideal. They don't last forever, but they give me at least two good years of hard wear. Designed specially to fit women's hands which makes a world of difference in comfort. Combine the flexibility of pigskin with a cowhide palm for extra strength and durability. To size, measure around your knuckles, excluding your thumb.

9601 Small	6-6½"	pair (0#) $20.00
9602 Medium	7-7½"	pair (0#) $20.00
9603 Large	8-8½"	pair (0#) $20.00

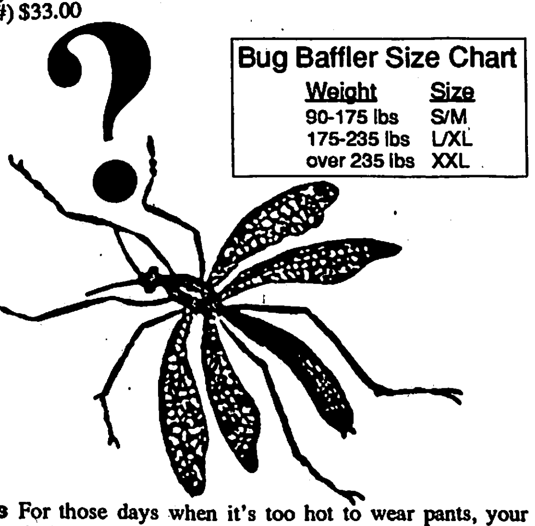


Bug Baffler Clothing CR discovered what wonderful garden garments these are when, at the height of black-fly season when sensible folk cringe behind screen doors and the fool-hardy glop themselves with Skin-So-Soft only to be driven mad by the bugs in their eyes, he was able to garden in relative comfort and complete freedom even at dusk when the little six-legged furies are at their most furious. Made of fine-mesh olive-green nylon which keeps the bugs out, allows breezes in and provides chemical-free insect protection.

9611-9613 Shirt Generously cut one-piece garment with permanently attached roomy headnet has zipper across the front neck seam for access to your face. Headnet is now black for better visibility. Elastic band at hips. Sleeves have stretch knit cuffs to fit securely but not uncomfortably.
9611 S/M each (0#) $31.00; **9612** L/XL each (0#) $31.00
9613 XXL each (0#) $33.00

Bug Baffler Size Chart

Weight	Size
90-175 lbs	S/M
175-235 lbs	L/XL
over 235 lbs	XXL



9621-9622 Pants For those days when it's too hot to wear pants, your comfort is limited only by your sense of modesty. The waist is elastic with snap adjustments to take up the slack.
9621 S/M each (0#) $24.50; **9622** L/XL each (0#) $24.50

9626 Headnet Patented hood design allows plenty of room for a hat and seamless construction provides for unobstructed vision through the improved black net. Elastic bands slip under arms to hold the hood securely in place. Perfect for bee observation. One size.
9626 Each (0#) $8.00

9627 Ankle Guards If your socks are like mine, the elastic in them is no longer adequate to hold your pant legs in securely. Ankle guards with stretch knit band at the ankle and elastic band at the calf keep the bugs out of your socks and pantlegs. One size.
9627 Each pair (0#) $8.50

9701 Garden Soap Contains 40% olive oil and no animal fats and is specially formulated for gardeners. The tan 4½ oz bar is flecked with ground rosemary and is not highly scented. It contains the essential oils of eucalyptus and rosemary to soothe and rejuvenate scratched dry skin. Made in Bowdoinham, Maine.
9701 Bar (0#) $3.50

9703 Bygone Insect Repellent From Lakon Herbals in Vermont, compounded of eucalyptus, rosemary, birch and peppermint oils in a canola oil base. Rated by *Natural Health* as one of the most effective natural outdoor formulas. My daughter spent a comfortable night, camping by New Sharon bog with Bygone as a close companion. Pleasing aroma. Doubles as an herbal massage for sore muscles. Safe for pregnant women and children, does not contain pennyroyal or citronella.
9703 2 oz (0#) $4.50

Avena Botanicals

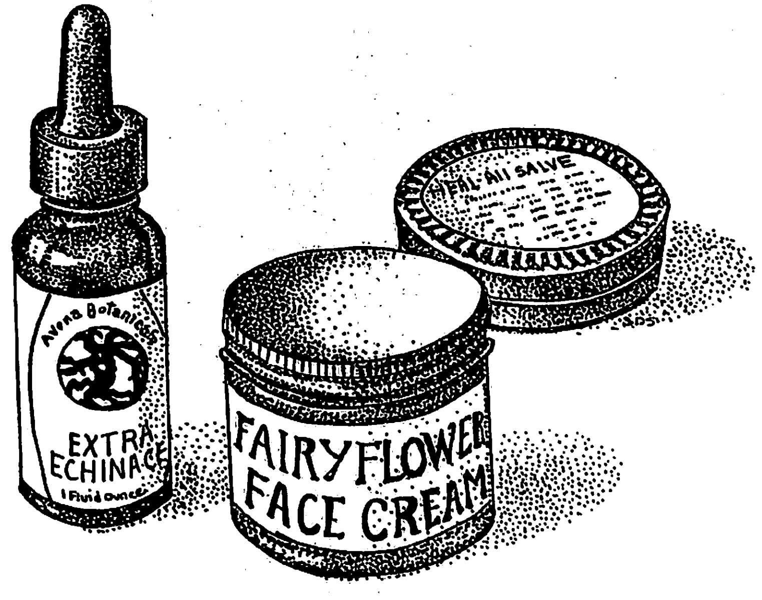
9711 Heal-All Salve After your hands have been roughened by a day's grubbing in the soil, they need an appointment with an ointment! Soothe them with this salve made from Alfalfa, Basil, Borage, Calendula flowers, Comfrey root, Plantain, Red Clover blossoms, St. Johnswort flowers, beeswax and Self-Heal flower essence. Tin with pop-off lid.
9711 1 oz (0#) $5.50

9717 Avena Botanicals Face Cream Formerly known as Fairy Flower Face Cream, Avena's recipe to soothe, soften and moisturize your skin after it has been buffeted by wind and weather. Contains Comfrey, Calendula, Linden flowers and Mugwort leaves and flowers in a base of Apricot kernel, Coconut and Almond oils; Rose water, Beeswax and pure essential oil of Lavender. Glass jar with screw-on lid.
9717 2 oz (0#) $7.50

9721 Spring Tonic Eating dandelion greens in the spring is a New England tradition. Spring Tonic contains tinctures of Dandelion root, flowers and leaves, Yellow Dock root and leaves, Burdock root and Nettle leaves. As the days grow longer, those first parsnips, scallions and sorrel leaves along with a bit of Spring Tonic can help wake us from our long winter torpor. Glass bottle with dropper.
9721 1 oz (0#) $7.50

9726-9727 Immune Tune An immune system supporter and energy builder widely used by the Fedco staff. A combination of Siberian Ginseng root, Astragalus root, Schizandra berry, Codonopsis root, Prickly Ash bark, Licorice root and Cinnamon bark. 1 oz glass bottle with dropper; 4 oz glass bottle with cap.
9726 1 oz (0#) $7.50; **9727** 4 oz (0#) $28.50

9731-9732 Extra Echinacea Tincture of *Echinacea purpurea* roots, leaves, flowers and seeds and Echinacea flower essence. We take it to ward off cold symptoms when they first appear. 1 oz glass bottle with dropper; 4 oz glass bottle with cap.
9731 1 oz (0#) $7.50; **9732** 4 oz (0#) $28.50



Avena Botanicals: A small woman-run herbal apothecary in West Rockport begun in 1985 by herbalist and gardener Deb Soule, Avena has provided herbal health care and wisdom to many Mainers. The Avena fairies hand-tend their delightful gardens with loving care. The attention they give each individual plant resonates through to their products. Planted and harvested with the seasons, sun and moon, certified-organic whole herbs are tinctured, dried, or made into oils and salves for the whole body. We offer selections useful for gardeners as well as remedies oft-used by the Fedco staff. For the complete catalog, please send $2 to Avena Botanicals, 219 Mill St., Rockland, ME 04841.

FEDCO SEEDS

Co-op Seed Packers

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Fedco Seeds Macro Index

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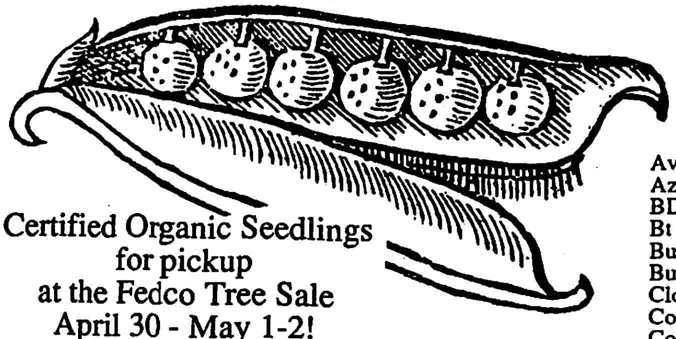

Certified Organic Seedlings
for pickup
at the Fedco Tree Sale
April 30 - May 1-2!

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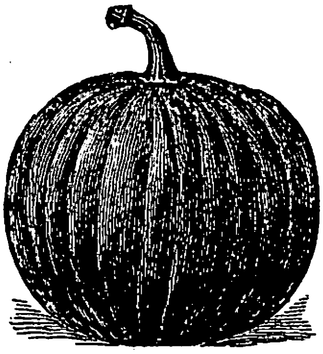

> I bequeath myself to the dirt to grow from the grass I love,
> If you want me again look for me under your bootsoles.
>
> You will hardly know who I am or what I mean,
> But I shall be good health to you nevertheless,
> And filter and fibre your blood.
>
> Failing to fetch me at first keep encouraged,
> Missing me one place search another,
> I stop somewhere waiting for you.
>
> *Song of Myself*
> Leaves of Grass

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